BY ORDER OF THE COMMANDER
AIR FORCE SPACE COMMAND

AIR FORCE SPACE COMMAND
INSTRUCTION 99-102

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Test and Evaluation

INTERCONTINENTAL BALLISTIC MISSILE (ICBM) FORCE DEVELOPMENT EVALUATION (FDE) PROCEDURES

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OPR: DOTO (Capt Kathy G. Reigstad)

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This instruction implements DoD Directive 5000.1, ***Defense Acquisition and Air Force Policy Directive*** (AFPD) 99-1, ***Test and Evaluation Process*** by establishing Air Force Space Command (AFSPC) requirements and guidance to conduct the ICBM FDE program. It also implements guidance outlined in AFI99-102, ***Operational Test and Evaluation***, to ensure full understanding of the test process and the terms used. The information contained herein replaces that found in SACR 55-53, Volumes I, II, III, and IV, which are no longer valid for AFSPC guidance. This instruction applies to HQ AFSPC, HQ Space Warfare Center (HQ SWC) and subordinate units conducting the ICBM FDE program. The ICBM FDE program includes flight tests, simulated electronic launches (SEL), and weapon system readiness evaluations. Information contained in this instruction covers different weapon systems. Code symbols that precede a paragraph identify information related to a particular system or test. This instruction does not apply to Air Force Reserve nor Air National Guard units. Organizations may supplement this instruction. Coordination with HQ AFSPC/DOTO is required prior to the finalization of unit supplements.

The reporting requirements in this directive are exempt from report control symbol (RCS) licensing in accordance with AFI37-124, ***The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections.***

Chapter 1

OVERVIEW

1.1. General. AFSPC conducts the ICBM FDE program to provide Single Integrated Operational Plan (SIOP) accuracy and reliability planning factors for the Commander in Chief, USSTRATCOM. There are three ICBM FDE programs: flight tests, SEL tests, and weapon system readiness evaluations. Flight testing launches operational ICBMs in a peacetime environment in as near to the operational flight environment as possible. Flight tests are designated Glory Trips. Simulated electronic launch tests provide the most complete test of the deployed ICBM force from crew commit actions through issuance of [Minuteman]: first stage ignition signal [Peacekeeper]: launch eject gas generator ignition signal. SEL tests are designated as Giant Pace tests. The alert readiness of deployed ICBMs is verified by monthly weapon system evaluations designated as Olympic Play tests. Additionally, AFSPC conducts recurring Higher Authority Communications/Rapid Message Processing Element (HAC/RMPE) software operational testing for the Rapid Execution and Combat Targeting (REACT) console. REACT is an upgrade to the MM III command and control system. HAC/RMPE performs automated rapid message processing, error correction, duplicate message suppression and alarm integration for all emergency action messages received. AFSPC tests the HAC/RMPE operational software to ensure each software change meets AFSPC needs.

1.2. Objectives:

1.2.1. Operational Test Launch (OTL) Objectives. Basic objectives of the OTL program are to establish SIOP accuracy and reliability planning factors under representative operational test conditions; detect trends or changes in weapon system accuracy and reliability; identify areas for weapon system modification/improvement; and verify operational effectiveness and suitability. To achieve these basic objectives, individual mission test objectives are identified as Category I, II, or III.

1.2.1.1. Category I. Achievement of category I objectives is mandatory for a successful program, mission, or test. Not achieving a category I objective would significantly impact program schedules, costs, and verification of system performance. The Commander, 576th Flight Test Squadron (576 FLTS/CC), in coordination with the designated SWC representative, can waive category I OTL objectives.

1.2.1.2. Category II. Achievement of category II objectives is required to make the program, mission, or test a complete success. These objectives could be waived due to performance, cost, time, or other constraints. A launch will not be rescheduled to meet a category II objective. A launch countdown will not be held to achieve a category II objective if the hold would adversely affect a category I objective. The 576 FLTS/CC can waive category II OTL objectives.

1.2.1.3. Category III. Achievement of a category III objective is desired for design, or environmental research, certain Associated Operations, or a supporting engineering effort. Generally, these objectives would be beneficial to achieve if support can be provided within existing support agency capabilities. A launch countdown will not be rescheduled or held to achieve a Category III objective. The 576 FLTS/CC can waive a category III objective.

1.2.2. SEL Objectives. The basic SEL objectives are to assess reliability of ICBM weapon systems in their deployed environment. SEL objectives are divided into three categories; primary, secondary, and special.

1.2.2.1. Primary. Achievement of primary objectives is mandatory for a successful program or test. Primary objectives include verifying the capability of the launch control center (LCC) and the airborne launch control center (ALCC) command and control system to process required launch commands, the capability of the launch facility (LF) ground system electronics processing and missile guidance ground program systems to process the launch sequence during the terminal countdown sequence, and reliability of the ICBM weapon system. Only the 576 FLTS/CC or operations officer may waive primary objectives.

1.2.2.2. Secondary. Achievement of secondary objectives is required to make the program or test a complete success. These objectives could be waived due to performance, cost, time, or other constraints. The 576 FLTS/CC or operations officer or designated representative may waive secondary objectives.

1.2.2.3. Special. Achievement of special objectives can either be primary or secondary for a successful program or test. Special objectives are test specific. Waiver authority of special objectives will be identified in the Test Order and/or Test Plan.

1.2.3. Weapon System Readiness Evaluation Objectives. The purpose of this FDE program is to verify the readiness status of the ICBM alert force and provide data for estimating launch reliability throughout the life cycle of the deployed weapon system.

1.3. Guidance. Operational realism is second only to safety when conducting ICBM FDE programs. Weapon systems tested in FDE programs must be, as much as possible, representative of the deployed force and employed environment. This concept governs configuration of facilities, selection of missiles, deployment of task forces, use of technical data, and flight profile/targeting options. For an ICBM OTL, a missile must be on emergency war order (EWO) alert to be eligible for selection as a test asset.

1.3.1. Security. In addition to safety, security is an important consideration. As a general guide, test results will be unclassified as long as the test was completed successfully with no indication of sortie failure or of data revealing weapon system capabilities, vulnerabilities, or limitations. Refer to the appropriate security classification guides for further information.

1.4. ICBM FDE Process. The ICBM FDE process has three parts: test plan preparation, test conduct and test reporting. **Figure 1.1.** through **Figure 1.3.** illustrate this process.

1.4.1. Effective Test Program. There are several keys to an effective test program. They include clear definitions of the test objectives; definitions of elements to be measured and the means by which they are measured; a means of comparing test results against established standards and goals; and accurate reporting to the customer.

1.4.1.1. Every test conducted under the ICBM FDE program will have these key elements. Based on customer requirements, HQ AFSPC/DOTO will prepare a test order (TO) and test order annexes (TOAs) (if required for each test) that define the overall objectives of the test and identifies the agencies tasked to support the test. HQ SWC/XRT will prepare a Test Execution Order (TEO) which contains mission specific requirements each participating unit must accomplish to ensure mission success. Amendments to the TEO will be published and distributed to participating units as required. The 576 FLTS will prepare a test plan (TP) and test plan annexes (TPAs) (if required) that further define objectives and standards of each test. HQ AFSPC/DOTO will review

the TP and TPAs. The 576 FLTS will also write detailed test procedures to properly execute the test. For every test, the 576 FLTS will prepare a report that provides detailed test results.

1.4.2. Goal. The goal of ICBM FDE is to provide accuracy and reliability data for SIOP planning factors and OO-ALC's aging surveillance program. The established goals for accuracy and reliability are as follows:

1.4.2.1. Accuracy. By definition, circular error probability (CEP) is the radius of a circle centered on the target, inside which we expect half the reentry vehicles (RVs) to impact. Half will land outside the CEP; however, the radial miss should be no more than 3 1/2 times the CEP. Anything over this amount becomes a reliability failure and not an accuracy data point. The accuracy data base is cumulative and is maintained by HQ SWC/XRT.

1.4.2.2. Reliability. Weapon system reliability (WSR) for ICBMs is a product of launch reliability, powered flight reliability, missile guidance set reliability, reentry vehicle reliability, environmental sensing signal generator reliability (Mk 12A), and warhead reliability. The established goal for WSR is found in the ICBM Weapon System Mission Objectives Report. This document is published by HQ AFSPC/DRM and is classified SECRET. The SIOP WSR estimate is cumulative and the data base is maintained by HQ AFSPC/DOMN.

1.5. Test Forecast. HQ SWC/XRT, in consultation with its customers, will publish an ICBM and Space Test Forecast schedule covering three fiscal years. The HQ AFSPC/DO will approve the test forecast prior to distribution to the units.

Figure 1.1. ICBM Test Plan Preparation Flowchart and Table.

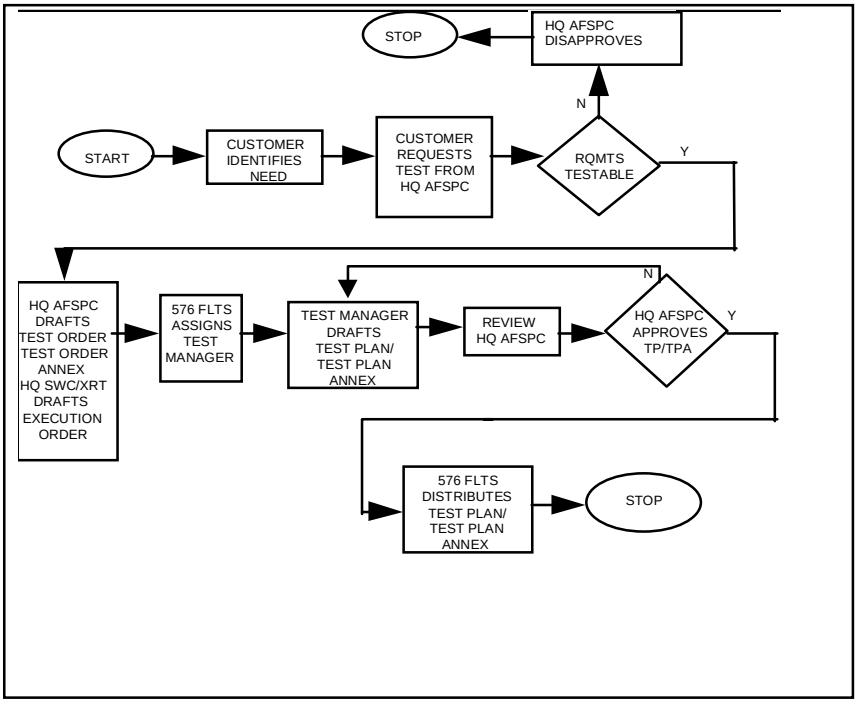

Table 1.1. ICBM Test Preparation Table.

ITEM	Product	Customer	Supplier	Approval Authority	Customer Expectation
1	Test Request	HQ AFSPC/ DOT	Air Staff, DOE, USSTRAT-COM, HQ AF-SPC/DOMN, BMDO, NAFs, AFOTEC, SPO, Wings/Groups	HQ AFSPC/ DOT	Testable Requirements

2	Disapproved Test Request	Air Staff, DOE, USSTRATCOM, HQ AFSPC/DOMN, BMDO, NAFs, AFOTEC, SPO, Wings/Groups	HQ AFSPC/DOT	HQ AFSPC/DOT	Justification for disapproval for one of the following reasons: Item previously tested; system conflicts with HQ AFSPC concept of operations; testing imposes unwarranted safety risks; system too costly to test.
3	Test Order & Annexes	576 FLTS	HQ AFSPC/DOT	HQ AFSPC/DO	See Sample Test Order
4	Test Manager	HQ AFSPC/DOT	576 FLTS	576 FLTS	Primary Accountability
5	Responsible Test Agency	HQ AFSPC/DOT	576 FLTS	HQ AFSPC/DOT	Selection based upon requirements
6	Test Resource Plan	576 FLTS	HQ AFSPC/DOT	HQ AFSPC/DOT	Provides Resources
7	Budget	576 FLTS	HQ AFSPC/DOT	HQ AFSPC/DOT	Provides funding to conduct testing
8	Test Plan & Annexes	576 FLTS, other customers	Test Manager	HQ AFSPC/DO	See Sample Test Plan

Figure 1.2. ICBM Test Conduct Flowhart Graphic.

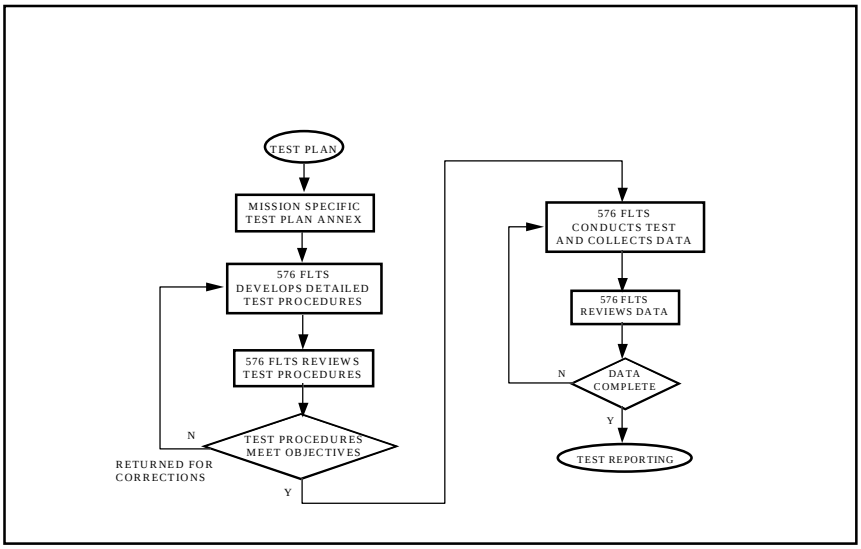

Table 1.2. ICBM Test Conduct Flowchart Table.

ITEM	Product	Customer	Supplier	Approval Authority	Customer Expectation
1	Detailed Test Procedures	Test Manager Launch Director	576 FLTS	576 FLTS/CC	Procedures for safe and objective test
2	Test Procedure Execution	576 FLTS	576 FLTS	HQ AFSPC/DOT SWC/XRT	According to Test Plan
3	Data	HQ AFSPC/DO	576 FLTS	576 FLTS	All objectives met

Figure 1.3. ICBM Test Report Preparation Flowchart and Table.

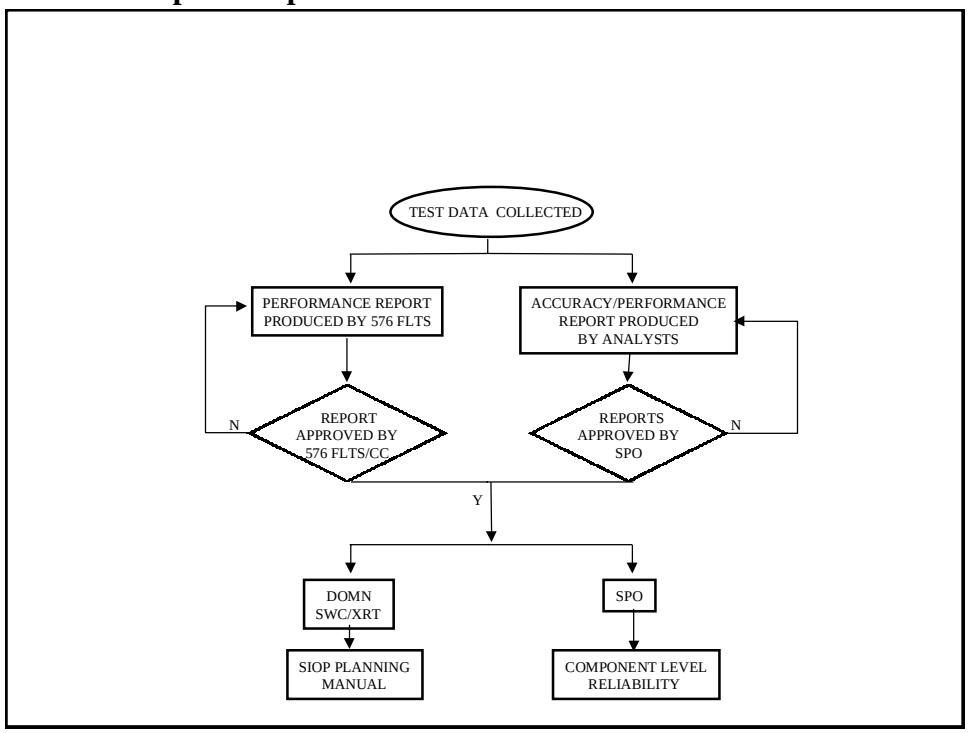

Table 1.3. Preparation Table.

ITEM	Product	Customer	Supplier	Approval Authority	Customer Expectation
1	Reduce Data	Test Manager	Data Analyst	Test Manager	Useable Data
2	Test Report	Air Staff, DOE, USSTRATCOM, HQ AFSPC/DOT/DOM, HQ SWC/CC/XR, BMDO, NAFs, AFOTEC, SPO, Wings/ Groups	576 FLTS	HQ SWC/CC	All objectives met
3	Lessons Learned	HQ AFSPC/DOT 576 FLTS/CC	Test Manager	576 FLTS	Document lessons learned

Chapter 2

OPERATIONAL TEST LAUNCH

2.1. General. OTL is the testing of an operational ballistic missile weapon system in as near to an operational environment as possible during peacetime. In this way, AFSPC determines and verifies ICBM weapon system accuracy and reliability.

2.2. Responsibilities:

2.2.1. HQ AFSPC:

2.2.1.1. Through HQ AFSPC/DOT, execute primary responsibility for ICBM OTL. Assign program officers as the primary point of contact for higher headquarters coordination and review of Minuteman III and Peacekeeper ICBM FDE matters for OTL. Ensure test results satisfy AFSPC test objectives.

2.2.1.2. Publish a TO every two years defining overall test objectives and the agencies tasked to support each test.

2.2.1.3. Coordinate on annual launch forecast which includes planned sortie select, alert ready, and launch dates, as well as missile configurations and supporting missile units.

2.2.1.4. Determine prioritization of test objectives.

2.2.1.5. Approve/disapprove Associated Operation participation in OTL launch activities.

2.2.1.6. Budget for and direct disbursement of funds to support and conduct the OTL program.

2.2.1.7. Approve the TP and TPAs.

2.2.1.8. Assume Missile Program Office (MPO) responsibilities as outlined in the USAF START Telemetry Compliance Plan.

2.2.1.9. Release Test/Annual Reports for distribution.

2.2.1.10. In conjunction with 576 FLTS and HQ SWC/XRT, coordinate all RS/RV component repair/replacement actions.

2.2.1.11. In conjunction with HQ SWC/XRT and SPO, maintain WSR and weapon system accuracy data bases.

2.2.2. USSTRATCOM:

2.2.2.1. Coordinate on ALCC support requests.

2.2.2.2. Coordinate requests to conduct USCINCSTRAT end-to-end connectivity and command/control demonstrations.

2.2.2.3. Provide code material as requested to support OTL activities.

2.2.3. HQ SWC:

2.2.3.1. Execute day to day program management of ICBM testing through HQ SWC/XR. Assign program officers as the primary point of contact for coordination and review of ICBM

FDE matters for OTL testing. Assign Responsible Test Agency (RTA) responsibilities to appropriate test agency.

2.2.3.2. Provide overall day to day program management of OTL testing.

2.2.3.3. Provide an annual ICBM test forecast containing mission identifier, missile unit, test timelines and key test dates.

2.2.3.4. Develop and distribute a TEO for each ICBM test, as required. This document will contain mission specific requirements each participating unit must accomplish to ensure mission success. Amendments to the TEO will be published and distributed to participating units as required.

2.2.3.5. Provide technical assistance in support of testing and technical support for maintenance deficiencies.

2.2.3.6. Act as final approval authority for test-related waiver requests.

2.2.3.7. Approve OTL Program Requirements Document (PRD) and Operational Requirements Document (ORD).

2.2.3.8. Ensure RTA conducts/participates in a Test Readiness Review Board (TRRB) prior to each test. The 30th Space Wing (SW) Launch Readiness Review (LRR) may meet the requirement for the RTA TRRB.

2.2.3.9. Approve Test/Annual Reports.

2.2.3.10. Maintain SIOP Planning Factors data base and provide updates to HQ AFSPC/DOM and USSTRATCOM on an annual basis.

2.2.4. 14th and 20th Air Force (AF):

2.2.4.1. (20 AF) Ensure completion of OTL requirements at assigned missile units and all task force activities at Vandenberg AFB.

2.2.4.2. (20 AF) Prepare and publish implementing instructions to supplement this instruction.

2.2.4.3. (20 AF) Waive operational technical order steps during Part II (Missile Removal & Transfer) and Part III (Missile Emplacement to Alert Readiness) after coordination with 576 FLTS.

2.2.4.4. (20 AF) Provide necessary code, targeting and range safety trajectory materials.

2.2.4.5. (20 AF) Designate a test conductor-airborne (TC-A) to be the focal point for all ALCC activities for OTLs being launched by the ALCC.

2.2.4.6. (14 AF/20 AF) Provide assistance to ensure subordinate units comply with the provisions of this instruction at the operational base and at Vandenberg AFB. Submit recommendations for changes to HQ AFSPC/DOTO and HQ SWC/XRT.

2.2.4.7. (20 AF) Provides Joint Plans Interim Changes (JPIC) and case data to remove LFs from SIOP alert to support OTLs.

2.2.5. 30th SW:

2.2.5.1. Comply with tasks defined in this instruction.

2.2.5.2. Provide assistance to the operational unit task force to include administrative, security, dining, billeting, and motor vehicle support. Assign a project officer to provide lead range support as specified in the PRD, TO, TOA, TP, and TPA and other directives.

2.2.5.3. Be responsible for missile, ground, flight and explosives safety of facilities, hardware, and personnel at Vandenberg AFB. 30 SW/SE has hold/waiver authority for safety systems and responsibility for missile flight safety.

2.2.5.3.1. Establish safety policies, procedures, and criteria to be followed during pre-launch, launch, and post-launch activities and conduct briefings for all task force personnel to ensure understanding. Briefings will include discussions of Vandenberg AFB unique equipment, operations, and past missile mishaps or anomalies.

2.2.5.3.2. Provide safety oversight by conducting periodic spot/high interest area inspections during test unique tasks.

2.2.5.3.3. Establish and control danger areas and missile flight hazard/caution areas.

2.2.5.3.4. Provide knowledgeable personnel to the missile potential hazard team (MPHT) and emergency response team (ERT).

2.2.5.3.5. Establish a communications net between all safety locations and personnel. Ensure safety activities are controlled from a central location.

2.2.5.3.6. Investigate and report all mishaps and participate, as required, in technical analysis functions.

2.2.5.3.7. Evaluate existing and forecasted weather conditions and comply with directives imposing weather restrictions during OTL operations.

2.2.5.4. Develop, coordinate, and document plans for the Western Range as required by the Universal Documentation System (UDS) to meet instrumentation and data requirements.

2.2.5.5. Maintain the Integrated and Peacekeeper Launch Support Center voice communications systems.

2.2.5.6. Readiness review prior to launch to ensure safety compliance, successful completion of launch processing milestones, and readiness of all personnel, flight hardware, equipment and facilities to support planned operations.

2.2.5.7. Coordinate OTL START/ABM compliance and ensure the same for associated operations.

2.2.6. 576 FLTS:

2.2.6.1. 576 FLTS/CC, as the designated SWC/CC representative, has overall responsibility for the execution of the operational test launch program.

2.2.6.2. Act as the RTA for the OTL program.

2.2.6.3. Publish a TP defining the objectives and standards for conducting test operations.

2.2.6.4. Provide a test manager (TM), launch director (LD), maintenance expeditor (ME) and other test personnel to conduct OTL operations. The TM will provide the SWC program officer with OTL status updates and advise him or her of OTL irregularities, malfunctions or deficiencies. The LD will be the single point of contact for task force activities and support at Vandenberg AFB.

2.2.6.5. Coordinate range scheduling, program documentation, range safety, and data requirements with range agencies.

2.2.6.6. Act as HQ SWC/XRT's representative to all groups formed in support of the OTL program at Vandenberg AFB (e.g., refurbishment, suspension and ejection systems, instrumentation, etc.). Maintain close coordination with HQ SWC/XRT and applicable engineering managers.

2.2.6.7. Evaluate impact of Associated Operation sensor, data, and security requirements on the AFSPC ICBM OTL program. Obtain HQ AFSPC/DOTO and HQ SWC/XRT authorization for Associated Operation participation.

2.2.6.8. Review all missile component and T.O. changes or waivers issued for an OTL mission and coordinate with HQ SWC/XRT on those impacting OTL objectives or program concept.

2.2.6.9. Evaluate operational, logistical, weather, and range sensor factors during the range countdown and determine possible degradation of test objectives. If waiver of range sensors doesn't prevent accomplishment of test objectives, inform 30 SW/CC and continue the launch countdown. If a category I or II OTL test objective cannot be achieved, 576 FLTS/CC may hold at the next hold point or recycle as necessary and render a GO/NO-GO recommendation. After the missile enters terminal countdown, launch will not be aborted for inability to achieve test objectives unless previously specified in the TPA.

2.2.6.10. Assist HQ AFSPC/DOMN and HQ SWC/XRT in evaluation of the mission and results. To preserve operational realism, investigation of weapon system faults occurring before issuance of the first execute launch command must be conducted by the task force commander (TFC) in close coordination with 576 FLTS. When 576 FLTS assistance is needed, it will be on a non-interference basis in consonance with OTL concepts and principles. Minuteman and Peacekeeper guidance system telemetry data will not be furnished to the task force for troubleshooting weapon system faults. Telemetry data will not be used as a basis for a launch decision, except in instances where a high probability for a catastrophic failure exists. Confer with the engineering manager and submit a coordinated, technical recommendation to the TM.

2.2.6.11. Evaluate/analyze countdown aborts or failures occurring after issuance of the first execute launch command.

2.2.6.11.1. Use all available resources (as required), including technical and engineering personnel available at Vandenberg AFB, System Engineering Level Evaluation Correction Team (SELECT), historical records, telemetry, and photographic data to evaluate anomalous missions or launch failures.

2.2.6.11.2. Act as the AFSPC technical managers and chair the launch analysis group (LAG) formed in support of OTLs at Vandenberg AFB IAW AFI 91-204 and HQ AFSPC/SE-002. As the AFSPC missile launch mishap representative at Vandenberg AFB, coordinate efforts of other agencies to isolate causes, evaluate impacts, and recommend corrective action for irregularities, malfunctions, or deficiencies. Maintain close coordination with the responsible engineering manager.

2.2.6.11.3. Advise HQ SWC/XRT and the parent unit of all OTL irregularities, malfunctions, or deficiencies, and submit follow-on reports until each is resolved. When reporting ALCC launch-related problems add USSTRATCOM/J362 to the address list.

2.2.6.11.4. During launch failure analysis/investigations, provide HQ AFSPC/DOTO, HQ SWC/XRT, 20 AF/LG and the parent unit a preliminary LAG report containing launch failure analysis/investigation status. Include USSTRATCOM/J362 for airborne operations. LAG follow-up reports, containing failure modes, will be distributed as required.

2.2.6.12. Publish a final performance report for each test and ensure all required reports outlined in attachments to this regulation are submitted.

2.2.6.13. Develop a receipt-through-launch schedule for each operational test launch and provide a copy to HQ SWC/XRT and the TFC.

2.2.6.14. Brief the unit task force on all Vandenberg AFB-unique procedures and configurations.

2.2.6.15. Inspect all test facilities prior to task force arrival. Furnish an operational LF, missile alert facility (MAF), equipment, vehicle and shop support to task forces while at Vandenberg AFB.

2.2.6.15.1. Accomplish all test-unique tasks involving instrumentation, safety, site configuration, and LF/MAF turn-around.

2.2.6.15.2. Provide a Missile Maintenance Operations Center (MMOC) through which the task force submits maintenance support requirements.

2.2.6.15.3. Receipt and inspect all OTL components. Open packages for inventory to obtain documentation and inspect for suspected damage. Do not open OTL packages without the appropriate 576 FLTS mission representative present.

2.2.6.15.4. Store OTL components received from the operational unit for issue to the task force. Coordinate with the LD and notify operational unit of items not received. Ensure proper replacements are obtained or tracer action initiated.

2.2.6.15.5. In conjunction with task force, assemble reentry system (RS) using OTL components sent from the operational unit and Mk 12/12A/21 test reentry vehicles (RVs). Forward copies of the RS build-up sheet to HQ AFSPC/LGMW and OO-ALC/LMRV. Media for OO-ALC may be either hard copy build-up sheets or Reentry Vehicle Configuration System (RVCS) formatted data on a 3 1/2 inch floppy diskette.

2.2.6.15.6. Provide a secure storage area for missile components salvaged from a catastrophic failure. Store parts until the LAG investigation is complete and 576 FLTS authorizes disposal.

2.2.6.15.7. [Peacekeeper] Conduct unique signal device assembly continuity test.

2.2.6.15.8. [Peacekeeper] Maintain the Launch Support System uninterruptable power supply.

2.2.6.15.9. Perform these checks following missile build-up: C-band transponder, command destruct, telemetry, missile test and verify the single vote timer is set IAW the TEO, as soon as possible after missile start-up.

2.2.6.15.10. Operate and maintain the Monitor and Control console.

2.2.6.15.11. Maintain sufficient copies of maintenance and operations T.O.s for distribution to task force members, as applicable.

2.2.7. Space Wings:

2.2.7.1. Comply with tasks defined in this instruction. Prepare and publish implementing instructions to supplement this AFSPCI. Provide copies to HQ AFSPC/DOTO, HQ SWC/XRT, 20 AF/DOV, and 576 FLTS.

2.2.7.2. Designate an individual as the operational unit's OTL manager and point of contact for all OTL planning activities. Operational unit OTL managers will establish and maintain contact with the 576 FLTS/TMOS.

2.2.7.3. Appoint a Lieutenant Colonel as the TFC who will be responsible for activities associated with a specific OTL. (Direct waivers on this requirement to HQ AFSPC/DOT). At Vandenberg AFB, the TFC is responsible for conduct of unit's portion of the OTL and for morale, welfare and discipline of task force personnel, while functionally being aligned to the 576 FLTS.

2.2.7.3.1. Operations Team Selection and Activities:

2.2.7.3.1.1. Select mission ready missile combat crews (MCC) as defined in AFSPCI 10-120102, *Space and Missile Crew Force Management*.

2.2.7.3.1.2. MCCs selected should be representative of the unit's crew force in regard to experience and duty assignments. MCCs will also be qualified in LCC configuration to be used in the OTL.

2.2.7.3.1.3. Task force MCCs are assigned in a ratio of three crews per LCC. 576 FLTS will direct any changes to this ratio.

2.2.7.3.1.4. Administer an evaluation prior to the task force departure for Vandenberg to crew members whose delinquency date is within 45 days of scheduled OTL date. Ensure EWO, codes training, and appropriate self-contained breathing apparatus training are current. The Task Force Authorization/Notification Roster will state if EWO and/or codes training are required while at Vandenberg AFB.

2.2.7.3.1.5. Task force MCCs must arrive at Vandenberg AFB with sufficient time to complete briefings and in-processing prior to missile emplacement for Minuteman OTLs and missile start up for Peacekeeper OTLs.

2.2.7.3.1.6. When T.O.s require changes, the task force will return their T.O.s for posting by 576 FLTS technical order library personnel. The TFC will ensure these T.O.s are returned when OTL activities are complete.

2.2.7.3.1.7. Maintain operational realism consistent with safety and OTL requirements. MCCs will process normal/abnormal status, maintain logs, conduct inspections, etc., as required at the operational unit.

2.2.7.3.1.8. Perform alert readiness monitoring until the OTL ends. MCCs monitoring OTL missiles may participate in the testing of another missile or missile system when such activities do not interfere with primary duties.

2.2.7.3.2. Maintenance Team Selection and Activities:

2.2.7.3.2.1. Select qualified missile maintenance, missile handling, electro-mechanical, RV/RS munitions maintenance and other personnel as necessary to conduct operational OTLs at Vandenberg AFB.

2.2.7.3.2.2. Personnel selected to participate in the OTL will be representative of the unit's maintenance force in regard to skill level and duty assignment. Ensure codes and appropriate self-contained breathing apparatus training is current.

2.2.7.3.2.3. Skill levels for maintenance personnel will approximate the overall skill level ratio of teams performing dispatch duty at the unit.

2.2.7.3.2.4. Maintain maintenance team integrity. However, if necessary, substitute members may be selected.

2.2.7.3.2.5. Task force maintenance teams will include, when practical, the same individuals involved in missile removal from the LF, preparation for transportation to Vandenberg AFB and munitions personnel who processed the RS. Operational units may rotate personnel to and from Vandenberg AFB after coordination with 576 FLTS.

2.2.7.3.2.6. All task forces must include at least one qualified quality assurance (QA) evaluator to observe critical tasks as determined by the TFC. Munitions QA functions will be provided by Vandenberg AFB personnel.

2.2.7.3.2.7. The task force may include a technical engineer and Facility Maintenance Team (FMT) at the discretion of the TFC, to assist in maintenance team activities.

2.2.7.3.2.8. Perform all actions to support the OTL using approved T.O. procedures. Task force maintenance personnel will use only T.O.s provided by 576 FLTS T.O. library.

2.2.7.3.2.9. Maintenance teams must bring their own authorized tool kits and personal equipment, including hard hats, gloves, coveralls, steel-toe boots, rain gear, and field jackets. 576 FLTS/TMW will maintain sufficient servicable tools, test and handling equipment and technical orders for use by task force munitions teams.

2.2.7.3.2.10. Task force maintenance teams must transport, emplace, check out, start-up, and maintain the missile and operational equipment until each OTL ends.

2.2.7.3.3. Task Force Supervision:

2.2.7.3.3.1. In addition to the TFC, MCCs, and maintenance teams, a task force will include those supervisory personnel necessary to ensure an efficient OTL. Normally, this will include an operations officer (senior ranking MCCC), maintenance officer, and maintenance non-commissioned officer (NCO) in charge. The operations and maintenance officers, representing the TFC, will directly supervise task force activities and coordinate these activities with the LD.

2.2.7.3.3.2. Task force QA functions will be representative of procedures used at the operational unit. Extent of QA inspection is a task force responsibility and should be commensurate with the scope and frequency at operational units. 576 FLTS will conduct OTL unique maintenance QA actions. Munitions QA functions will be provided by Vandenberg AFB personnel.

2.2.7.3.3.3. Task force activities in support of an OTL mission may be evaluated at the operational unit.

2.2.7.4. Form an OTL Working Group:

2.2.7.4.1. The OTL working group will include appropriate operations, maintenance, munitions, and support personnel.

2.2.7.4.2. The OTL working group will meet before scheduled missile selection and review all requirements necessary to conduct an OTL. Maintenance scheduling control should present the proposed missile processing schedule. Place special emphasis on OTL component processing, documentation, and shipment. Throughout the entire OTL process, the concept of operational realism must be preserved. In addition, the TFC should emphasize that LD's are the focal point for task force support requirements. LDs will ensure the ME is informed of any impact upon OTL equipment.

2.2.7.4.3. OTL working group members will keep the TFC informed of their respective activities, problems encountered, and recommended actions. As required, the TFC will keep 576 FLTS informed of unit activities before missile select and inform the LD of anything that may impact OTL activities.

2.2.7.4.4. After each mission, the OTL working group will convene to evaluate unit activities, identify problem areas, and provide recommendations for the TFC's report.

2.2.7.5. Provide all specified weapon system components.

2.2.7.6. Provide a Task Force Authorization/Notification Roster of personnel participating in the OTL to arrive no later than ten working days prior to task force arrival at Vandenberg AFB. Units may use electronic form AF Form 3138, **General Purpose**. Rosters will be mailed to HQ SWC/XRT, 576 FLTS MMOC and the LD.

2.2.7.7. Transportation of task force personnel to and from Vandenberg AFB should meet mission requirements at the lowest overall cost. If military airlift is selected, ensure airlift request is submitted IAW AFI 13-206, ***Operational Support Airlift Management***, no later than 45 days prior to estimated task force departure.

2.2.7.8. Coordinate on the Missile Receipt-Through-Launch schedule.

2.2.7.9. At Vandenberg AFB, the task force will:

2.2.7.9.1. Provide recall rosters to the LD, and 576 FLTS MMOC.

2.2.7.9.2. Verify MAF and LF status during site familiarization.

2.2.7.9.3. Exercise technical control and decision authority for operational aspects of the OTL except those involving test-unique range and safety requirements and those jeopardizing OTL objectives.

2.2.7.9.4. Conduct pre-departure briefings and debriefings.

2.2.7.9.5. Coordinate all task force maintenance/operations schedules and actions (especially deviations from normal operational procedures) with 576 FLTS MMOC and the LD. Coordinate with parent missile unit MMOC as appropriate.

2.2.7.9.6. Conduct OTL in as near an operational environment as possible:

2.2.7.9.6.1. Only allow qualified/certified task force technicians to perform OTL tasks.

2.2.7.9.6.2. The task force is responsible for MAF and LF from site familiarization through completion of countdown activities except as specified by this instruction. Responsibility for the missile begins when custody is transferred from 576 FLTS.

2.2.7.9.6.3. Unit task force munitions personnel and 576 FLTS/TMW munitions personnel will perform RV/RS tasks in accordance with the Munitions FOT&E Memorandum of Agreement. Activities conducted in the Munitions Area or the Payload Assembly Building will be controlled/monitored through Munitions Control. Munitions Control will coordinate with MMOC personnel for resolution of all situations.

2.2.7.9.6.4. Emplace the missile and perform all operational functions necessary to place missile on alert.

2.2.7.9.6.5. Monitor alert readiness until the missile is launched or OTL is terminated.

2.2.7.9.6.6. Conduct the launch IAW appropriate technical orders and countdown documents.

2.2.7.9.7. Designate task force operations or maintenance officer as the missile safety representative who will ensure safety practices and applicable technical orders are followed.

2.2.7.9.7.1. Maintain continuous liaison with the 30 SW/SE to ensure current knowledge and adherence to safety requirements.

2.2.7.9.7.2. The TFC will act as a deputy to MPHT weapon system element commander when a task force missile and facilities are under task force control and potentially hazardous conditions exist.

2.2.7.9.7.3. Provide technically qualified personnel to assist 30 SW and 576 FLTS personnel as members of the MPHT and Emergency Response Team (ERT).

2.2.7.9.7.4. Participate in emergency actions in potentially hazardous situations involving the operational unit's missile and/or task force operated facilities.

2.2.7.9.8. TFC's will verify task force readiness during the 30 SW LRR.

2.2.7.9.9. The TFC will ensure all equipment hand receipts issued by 576 FLTS agencies to task force personnel are cleared, and assigned work areas and vehicles are clean before responsible task force members depart.

2.2.7.9.10. If a LAG is formed, the task force will support as requested, and will obtain LAG Chairperson permission prior to departure from Vandenberg AFB to their home unit.

2.2.7.9.11. Submit required reports.

2.3. OTL Selection Procedures:

2.3.1. Selection Process. HQ SWC/XRT randomly selects a missile and associated LF components from a predetermined, representative sample of the deployed force. HQ SWC/XRT will coordinate with HQ AFSPC/DOTO/DOMN/LGML/LGMW, 20 AF, OO-ALC/LM, and USSTRATCOM/J312 on sortie selection to ensure sortie is representative of deployed force and ensure SIOP coverage is maintained during removal and replacement of the selected sortie. HQ SWC/XRT will contact selected unit of missile selection and collect the following data: LFs scheduled off alert and why; and LFs that cannot be reached due to weather, impassable roads, inoperative primary access hatch, etc.

During disassembly, inspection, test, and re-assembly, report any defects which exceed allowable criteria to the appropriate engineering manager and forward copies of discrepancies to 576 FLTS/TMO. If at any time from selection through launch a component is identified as non-representative or non-flightworthy, the engineering manager will provide an accounting of similarly configured components in the deployed force. Engineering managers will then provide the expected impact on flight and any plans currently underway to remove items in question from the deployed force.

2.3.1.1. Non-representative. A component is considered non-representative for two reasons: first, a newly identified, previously unforeseen problem which puts the ability of the component to function properly in question; second, identified modifications based on deferred engineering change proposals (ECPs) or time compliance technical orders (TCTOs) which may affect system reliability or accuracy. If components are being removed from the deployed force on a priority basis and all such components will be removed from the field prior to the next projected SIOP planning factor update, select another component for the test. However, if the configuration will remain in the deployed force indefinitely, consider it representative and fly it.

2.3.1.2. Non-flightworthy. A component is considered non-flightworthy if that component is known or suspected to fail, thus preventing the missile from completing its OTL mission. If components are considered non-flightworthy and non-representative, select another component. If components are considered non-flightworthy but representative, ship it to the engineering manager for ground testing or depot level engineering for evaluation. Rather than flying a known or suspected failure, the engineering manager will test components in as near flight conditions as possible, or perform a depot level engineering analysis of the component if ground testing is impractical. If the component fails ground testing, or evaluation indicates it would not have supported a successful flight, it will be declared a representative failure. If the component passes ground testing, or engineering evaluation indicates it would have supported a successful flight, it will be declared a no-test since a ground test or engineering evaluation cannot completely replicate flight conditions. When a component is scored a no-test, its replacement will be used to score the flight.

2.4. Part I - Alert Readiness Test:

2.4.1. This part verifies the alert readiness condition of a selected missile by exercising launch critical components through automatic weapon system tests. When notified of missile selection, the unit will not perform maintenance, modification, or inspections to selected missile before Part I tests. Accomplish Part I tests on selected sortie and backup guidance set (if required) as soon as possible after selection notification. If the selected missile fails any one of these tests, consider this portion of the exercise a failure and notify HQ SWC/XRT, 20 AF, LD and report test results immediately. Every effort will be made to ensure there is no extended delay between Part I testing and removal from alert; otherwise notify 576 FLTS LD immediately.

2.4.1.1. HQ SWC/XRT will notify operational unit MMOC by telephone of the missile selected and give authority to begin Part I. Notification will allow the affected unit to perform Part I tests and dispatch maintenance personnel. The sortie will not be removed from alert until directed by a JPIC. Q SWC/XRT will notify USSTRATCOM/J312, 20 AF and the LD of the missile selected. Operational unit MMOC will notify the TFC of sortie selection. HQ SWC/XRT will select a backup guidance set as required.

2.4.2. The following Part I tests, combined with normal monitoring of "NO-GO" parameters, check most functions which would prevent a launch if a malfunction occurred. These tests provide weapon system alert readiness, operational countdown reliability data and provides the maximum possible launch evaluation of selected launch facility and missile.

2.4.2.1. [WS-118A, WS-133A-M] Sensitive command network test (SCNT).

2.4.2.2. [WS-133B] Ground system test (GST) (Use medium frequency radio if possible).

2.4.2.3. Missile test, segments 1 and 2.

2.4.2.4. Enable test.

2.4.3. If a missile fails to successfully complete Part I, and failure was caused by operational ground equipment malfunctions, correct the malfunction and continue. If the missile performs satisfactorily, process it for shipment to Vandenberg AFB. If failure was caused by aerospace vehicle equipment malfunction, correct the malfunction and return missile to alert. HQ SWC/XRT will select another missile. In either case, report to the LD as a Part I failure.

2.4.4. [Minuteman] Perform the following guidance assessment calibrations (2 hours after Part I tests).

2.4.4.1. Phi Calibration.

2.4.4.2. Inertial Measurement Unit (IMU) Calibration, Segment 1.

2.4.4.3. IMU Calibration, Segment 2.

2.4.4.4. PSAT Calibration.

2.4.5. If an on-alert backup guidance set is selected, conduct Part I tests on the missile immediately.

2.4.6. [Minuteman] Before removing the primary and back-up sorties from alert, obtain missile guidance set (MGS)-peculiar gyro data numbers by accomplishing GENERATE STACK for a target case assigned to the selected MGS and viewing the number on the Target/Execution Plan Case Generation Summary Report. Include gyro data numbers in the OTL Sortie Status Report.

2.4.7. If a deficiency is discovered during Part I which would have prevented launch, immediately notify 576 FLTS. If this deficiency was caused by personnel or procedural error and applicable components perform satisfactorily, continue the mission. If this deficiency was caused by a hardware malfunction, correct it and return the missile to alert. HQ SWC/XRT will select another missile. In either situation report a Part I failure to the LD.

2.4.8. If a missile stage, missile stage component, [Peacekeeper] LEGG, or RS malfunctions or is damaged after Part I, notify the LD. Coordinate with the LD as necessary to determine if repairs can be made in a timely manner and where repairs must be made. If normal field-level repair can clear discrepancies, make repairs at operational missile unit or at the 576 FLTS and continue. If a discrepancy requires depot-level maintenance, HQ SWC/XRT may terminate the mission and select another missile or missile component.

2.5. Part II - Missile Removal and Transfer:

2.5.1. This part consists of missile, guidance set, RS, and certain other LF hardware removal, component processing at the operational unit, shipment, receipt at Vandenberg AFB, and installation and

checkout of range safety equipment. After Part I has been successfully completed, the operational unit must:

2.5.1.1. Capture "Depot IMU data".

2.5.1.2. Remove the missile from alert. Ensure JPIC is received from 20 AF/DOME prior to removal from alert.

2.5.1.3. Remove all necessary LF ordnance for shipment to Vandenberg AFB unless otherwise directed by the TEO.

2.5.1.4. Remove the guidance set and RS. [Minuteman] Inspect primary and backup MGS to determine if a plate cover has been installed in place of the MGS optical window. If a plate cover is installed in either the primary or backup MGS, notify 576 FLTS via Glory Trip Status Report. 576 FLTS personnel will replace the plate cover with an MGS window if required. [Peacekeeper] Missile guidance and control system (MGCS) elastomer boots will be removed and not shipped unless directed by the TEO.

2.5.1.5. [Peacekeeper] Remove the missile stages and Launch Eject Gas Generator (LEGG). After stages I and II are removed from the LF and end rings are installed, perform a measurement to determine correct pad position per T.O. 21-LG118A-2-17-12. If pads are out of tolerance, correct this condition prior to shipment to prevent delay in stage processing at Vandenberg AFB.

2.5.1.6. Conduct a cursory inspection to determine overall condition of the RS. Conduct all Reentry System Test Set (RSTS) initial build tests and inspections in reverse order as RS disassembly is being conducted. Peacekeeper component tests need not be performed. Provide all test tapes and associate them with applicable components or hardware. Inspect and test all Electro Explosive Devices (EEDs) (documented resistance measurements aren't required). Exact reassembly of the RS as it was configured on-site is paramount. Record and catalog all hardware associated with each specific RV and configuration of the payload. Segregate attaching hardware into separate bags per RV or payload. Prepare components for shipment IAW procedures stated in T.O. procedures in paragraphs 2.14 and 2.15.

2.5.1.7. Prepare the missile stages, RS components, primary and backup guidance set, [Peacekeeper] LEGG, and LF ordnance for shipment to Vandenberg AFB IAW T.O. procedures identified in paragraphs 2.14 and 2.15.

2.5.1.8. During RS processing/preparations for shipment, immediately report all discrepancies noted during inspections or electrical tests to the LD, HQ AFSPC/LGMW and applicable engineering manager (SA-ALC or OO-ALC). Following this notification, a preliminary assessment of the discrepancies will be made (scope, mission, impact, etc.). Several options are possible - component replacement, T.O. waiver, or reselection. Discrepancies causing mission failure require termination of the exercise and selection of another missile or RS. Less severe discrepancies could result in component replacement action and continuation of the exercise. In either case, applicable engineering managers will provide the unit shipping instructions so suspect components can undergo additional testing and inspection. 576 FLTS will request a complete engineering evaluation (verification of failure, identification of the cause, and mission impact assessment) from the engineering manager. The engineering manager will forward results under separate cover to: HQ AFSPC/DOTO/DOMN/LGMW, HQ SWC/XRT, 20 AF, and 576 FLTS. In certain other circumstances, suspect components may require T.O. waivers to allow these components to continue on the mission and facilitate accurate assessment under actual launch conditions.

HQ AFSPC/DOTO/LGMW, HQ SWC/XRT, 20 AF/DOV/LGM, 576 FLTS and applicable engineering managers will make the decision to pursue this latter course of action.

2.5.1.9. Direct communication between the unit and SA-ALC/OO-ALC is authorized. Identify all missile stage and RS repairs and component replacements, including ordnance items, required after selection by nomenclature, part, serial, and lot numbers. TFC's and the TM must ensure this information is included as inputs to applicable reports. Ship missile stages and components to Vandenberg AFB IAW movement procedures outlined in T.O. paragraphs 2.14 and 2.15.

2.5.2. At Vandenberg AFB:

2.5.2.1. The 576 FLTS will:

2.5.2.1.1. Receive and administratively process the guidance set, RS components, ordnance items, etc.

2.5.2.1.2. Transport booster components and [Peacekeeper] LEGG to applicable storage and processing facilities.

2.5.2.1.3. Perform receipt inspections.

2.5.2.1.4. Perform required tasks to process/install stages and instrumentation.

2.5.2.1.5. Store and issue guidance sets to task force.

2.5.2.1.6. Assemble the RV/RS in accordance with the Munitions FDE Memorandum of Agreement.

2.5.2.1.7. Ensure the non-nuclear verification test is accomplished by Sandia National Labs personnel.

NOTE:

Installation and checkout of safety destruct system equipment will not be accomplished simultaneously with operational weapon system tasks.

2.5.2.2. TCTO Requirements:

2.5.2.2.1. For mandatory "Prior-to-Flight" modifications (Immediate Action/Urgent Action TCTOs), complete the required inspection/modification and proceed with the exercise. If this is not feasible, discontinue the exercise and HQ SWC/XRT will select a modified missile.

2.5.2.2.2. For a routine TCTO issued against a selected missile/RV/RS/guidance set and not mandatory before flight, continue the exercise without modification.

2.5.2.2.3. For Immediate Action/Urgent Action TCTO changes issued for flight safety, instrumentation or other test-unique equipment, HQ AFSPC/DOTO and HQ SWC/XRT will suspend the mission until completion of the required inspection/modification.

2.5.2.2.4. After receipt of an Immediate Action/Urgent Action TCTO, LD's will inform the TFC. TFC's, 576 FLTS/TMOO and the LD will jointly develop required maintenance recovery plans.

2.5.2.3. Vandenberg AFB Contingencies:

2.5.2.3.1. If a missile stage, guidance set, or [Peacekeeper] LEGG is damaged or fails during processing and requires normal field-level repair, or depot-level maintenance that can be performed at Vandenberg AFB, immediately notify the LD, HQ SWC/XRT, and HQ AFSPC/DOTO/LGML. Make necessary repairs, and proceed with the exercise.

2.5.2.3.2. If a missile stage subsystem is damaged or fails during processing and requires depot-level maintenance that can only be performed at a depot, immediately notify the LD, HQ SWC/XRT and HQ AFSPC/DOTO/LGML who may suspend the mission and provide directions.

2.5.2.3.3. If an RS or RV component fails electrical or physcial inspection or is otherwise rejectable and requires either normal or field-level or depot-level maintenance, notify the LD, HQ SWC/XRT and HQ AFSPC/DOTO/LGMW who may suspend the mission and select another RS or RV.

2.5.2.3.4. LD's will notify the TM of all weapon system repair discrepancies or replacement requirements. TM's will evaluate these requirements using the above criteria and provide a recommendation to HQ SWC/XRT.

2.5.2.4. The 576 FLTS will provide test coding materials and accomplish all wing code processor system coding operations. 576 FLTS/TEC will ensure only test code components are issued for use by the task force. The TFC will ensure proper code component control is maintained by task force personnel.

2.6. Part III - Missile Emplacement to Alert Readiness:

2.6.1. This part consists of operational unit task force transportation of missile components and associated ground equipment and generating the missile to alert status IAW prescribed operational weapon system technical data. Task force members are responsible for emplacement to alert readiness and ensuring missiles are configured IAW the TEO.

2.6.2. The 576 FLTS and Depot personnel will refurbish each LF and ensure LFs are ready for turnover to the task force for emplacement activities. The 576 FLTS will perform a complete [Minuteman] launch capability test [Peacekeeper] ground system test to verify the LF is ready to support the mission. 576 FLTS will perform pre and final launch hardening concurrent with task force activities.

2.6.3. Task force personnel will assume LCC weapon system monitoring responsibility upon receipt of status at the test LF.

2.6.4. Task force personnel:

2.6.4.1. Transport [Peacekeeper] LEGG, missile stages, RS (accountability signature required), and ordnance to the LF and emplace it.

2.6.4.2. Perform start-up and place the guidance system in operation. Load the guidance set computer and verify nominal performance.

2.6.4.3. Install keying variable in the LCC. Keying variables are installed at the LF during launch capability test and left installed prior to task force arrival.

2.6.4.4. Following initial start-up, perform required calibrations.

2.6.5. [Peacekeeper] 576 FLTS will perform test-unique electronic connectivity test set and low voltage connectivity test set checkout during missile emplacement.

2.6.6. Standard T.O. procedures will be followed to initiate start-up and fault isolation/correction. The date, time, and results of all weapon system tests, commands, and off-alert periods will be included in the TFC's report.

2.6.7. Contingencies identified in Part II (paragraph **2.11.2.3.**) while the task force is at Vandenberg AFB also apply for Part III.

2.6.7.1. Task force maintenance actions will not occur simultaneously with 576 FLTS maintenance actions unless required by the task.

2.6.7.2. On-site task force personnel will direct all questions regarding equipment, procedures, or T.O.s to parent unit MMOC through the 576 FLTS MMOC. When uncertainty exists as to the proper course of action, task force personnel will contact 576 FLTS MMOC immediately for clarification. The 576 FLTS MMOC will answer those questions concerning test unique equipment configurations and procedures. Questions on procedures or basic T.O. interpretation will be clarified within task force resources or by the operational unit and answers relayed to on-site teams. In situations where coordination between the on-site task force team and operational unit maintenance control is required, 576 FLTS MMOC will monitor communications to ensure any direction given is consistent with the known site configuration. Assistance provided to on-site task force personnel will be reported to LDs and included in the Performance Report. Any person noting a condition or operation adversely affecting safety of personnel or equipment, or jeopardizing OTL objectives will stop the operation and inform task force personnel and 576 FLTS MMOC. Personnel safety and protection of resources will take priority in all cases.

2.7. Part IV - Alert Readiness and Flight:

2.7.1. This part consists of alert readiness, countdown, launch, flight, and post-mission data evaluation.

2.7.2. The task force will accomplish weapon system tests and commands including calibrations IAW applicable T.O. procedures. The 576 FLTS MMOC will provide directions to accomplish tests and commands IAW T.O. procedures. The Safety Control Switch (SCS) key and plug will remain installed in the main LF distribution box from startup until all LF final enable procedures are accomplished and the LF is ready to be secured for launch except as needed in support of required Operations Directives or post maintenance.

2.7.3. Accomplish a confidence check and verify the single vote timer is set IAW the TEO, as soon as possible after missile start-up. This consists of monitor and control console and launch protection system checkouts as well as transponder, telemetry, command destruct and missile test. The 576 FLTS will evaluate telemetry received during a missile test to ensure proper telemetry operation.

2.7.4. Task force and 576 FLTS must coordinate LF close out for launch procedures. To evaluate LF/missile systems in a completely launch ready condition, the 576 FLTS must perform range check(s) to verify operation of test unique equipment.

2.7.5. TEOs will specify the date to attain alert ready status. Alert readiness begins at the completion of start-up, targeting, and associated testing (missile test, enable test, and required remote data change actions).

2.7.6. Prior to the start of launch countdown, Mission Directors will conference with the Launch Decision Authority for permission to proceed with countdown and missile launch.

2.7.7. The 576 FLTS will start range countdown activities early enough to achieve mission objectives during the launch window. Countdown events will provide for checks of the transponder, telemetry, and command destruct subsystems.

2.7.8. The 576 FLTS will author a range countdown document to ensure MCCs have no function other than normal operational base procedures until crews conference with the 576 FLTS Test Conductor (TC). Exception: LDs may direct MCCs to install a fully coded launch control panel (LCP) in the MCCC's console [Peacekeeper], REACT console [Minuteman], when two MCCs are present in the LCC and range countdown has begun or when both LCP and co-op launch keys are retained at the wing codes processing system (WCPS) vault.

2.7.9. The 576 FLTS will provide an OTL initiation message to ground or airborne MCCs. MCCs will react according to weapon system T.O.s and range countdown documents. After accomplishing appropriate checklist actions, crews will conference with the TC to coordinate launch command initiation and to ensure compliance with range safety requirements prior to missile liftoff.

2.7.10. Unless directed by T.O. or other directive, once an OTL missile has achieved alert readiness, it will not be removed from alert status without prior coordination with the TM, 576 FLTS MMOC and HQ SWC/XRT.

2.7.11. Contingencies:

2.7.11.1. If a missile fails during alert and requires field-level maintenance or depot-level maintenance that can be performed at Vandenberg AFB, immediately notify the LD, make necessary repairs, and proceed with the exercise. Use the backup guidance set selected for that mission or as directed by 576 FLTS, if required.

2.7.11.2. If a missile (downstage booster) subsystem fails during alert and requires depot-level maintenance that can only be done at depot, immediately notify the LD and suspend mission activities. HQ SWC/XRT will provide direction to accomplish repairs or select another missile.

2.7.11.3. If an RV/RS fails during alert and requires field-level maintenance that can be accomplished at Vandenberg AFB, or requires depot-level maintenance that can only be done at a depot, immediately notify the LD, HQ AFSPC/DOTO/LGMW and HQ SWC/XRT and suspend mission activities. HQ AFSPC/DOTO/LGMW and HQ SWC/XRT will coordinate with appropriate agencies and provide direction to accomplish repairs or select another RV/RS.

2.7.11.4. If a missile or subsystem failure results in a countdown abort and requires normal field-level or depot-level maintenance that can be performed at Vandenberg AFB, score it as a countdown failure, make repairs, and proceed with the mission.

2.7.11.5. If a missile failure during countdown requires depot-level repairs at the depot, score it as a countdown failure. HQ SWC/XRT may terminate the mission and select another missile.

2.7.11.6. If test-unique support equipment failure during countdown results in an abort, document the failure, correlate it with Part I results, correct the malfunction, and proceed with exercise activities. The mission will be considered a success if the flight is nominal.

2.7.11.7. [Peacekeeper] If an instrumentation and flight safety system truss assembly (ITA) malfunctions, replace it with a backup ITA. [Minuteman] If an instrumentation wafer malfunctions

and requires removal and replacement, the replaced wafer will be mated to a postured MGS unit. MGS changes will not be made to facilitate instrumentation wafer changes.

2.7.11.8. When a failure results in selection of another missile or in a countdown or launch failure/abort requiring repair before continuing with the exercise, HQ SWC/XRT may add a suffix to the Glory Trip identifier (e.g., Glory Trip 160GM-1) prior to continuing the mission.

2.7.11.9. TMs will evaluate repair/replacement requirements using the above criteria and provide a recommendation to HQ SWC/XRT.

2.7.11.10. HQ AFSPC/DOTO/SE, HQ SWC/XRT and the 576 FLTS will determine a LAG requirement for each countdown/launch anomaly or failure. LAG investigations include, but are not limited to, investigation and determination of launch hangfire causes, aborts, missile/instrumentation failures, and other anomalies that occur after the first launch vote is issued. The LAG will disband after all analysis and recommendations for further investigation or fixes have been completed and reported. Under special circumstances such as failure of range safety control or collateral damage, an Investigating and Reporting USAF Mishaps board may convene IAW AFI 91-204 and HQ AFSPC/SE-002.

2.7.12. The LD will direct and coordinate all LF and countdown activities to include weapon/instrumentation system troubleshooting activities starting with activation of the Missile Flight Hazard/Caution Area through mission termination.

2.7.13. LDs will determine the responsible agency for investigation or correction of malfunctions IAW the following guidelines:

2.7.13.1. Upon notification from the LD, TFCs will manage and control the investigation and/or correction of weapon system malfunctions occurring prior to the first execute launch command.

2.7.13.2. The 576 FLTS will manage and control investigations and/or correction of test-unique equipment malfunctions occurring prior to acceptance of the first execute launch command.

2.7.13.3. If a formal LAG is not formed, the 576 FLTS Systems Engineering Flight will manage and control investigations and/or correction of test-unique equipment malfunctions or weapon system malfunctions occurring after the first execute launch command is accepted.

2.7.13.3.1. 576 FLTS/CC will convene and chair the LAG to investigate and analyze launch malfunctions or flight failures.

2.7.13.3.2. The LAG will use telemetry-derived pre-launch test data products, weapon system status indications and printouts, missile combat crew logs, weapon system build records, telemetered launch data, [Minuteman] launcher environmental protective system [Peacekeeper] launcher protection system indications and printouts, and any other form of data product relevant to the investigation.

2.7.13.3.3. When a LAG investigation is convened, the task force will obtain LAG Chairperson permission prior to departing Vandenberg AFB for their home unit.

2.7.13.3.4. The LAG Chairman will report progress of the failure analysis as described in AFI 91-204 and HQ AFSPC/SE Safety Guide SE-002.

2.7.13.4. After Systems Engineering Response Team initial assessment, launch support team members will enter the LF after liftoff for an initial survey of possible launcher damage.

2.8. Logistics Procedures:

2.8.1. Credibility of the AFSPC flight test program depends largely on the control and safe transfer of missile components from an operational unit LF to the Vandenberg AFB LF. The operational unit and 576 FLTS will augment these procedures, as required, to ensure OTL components are properly documented, controlled, and handled during all phases of an OTL exercise.

2.8.2. Space Wing:

2.8.2.1. Expedite all missile components, as identified or as amended by TEOs, to Vandenberg AFB for operational testing. QA will inspect all OTL components prior to shipping. If damage is identified during inspections, QA will provide inputs to the TFC for preparation of an OTL Component Damage Report on all damaged components found.

2.8.2.2. The TFC will appoint a representative to monitor all shipping procedures from the operational unit. The representative must ensure all missile and LF component part numbers and serial numbers agree with those taken from selected sortie/sites and they are properly marked for shipment.

2.8.2.3. No component of an OTL missile should leave an LF or maintenance facility without the OTL identifier prominently marked on it, and no component will be released for packing and crating without specific guidance regarding how and where the container will be marked.

2.8.2.4. Remove and obliterate old markings to avoid losing small components and simplify Traffic Management Office (TMO) monitoring.

2.8.2.5. Ensure the proper Vandenberg AFB FB or FV account is properly annotated on containers and fully documented.

2.8.2.6. Mark pallets "DO NOT SEPARATE".

2.8.2.7. TMO will block space to final destination to ensure enroute stations do not separate or break up pallets.

2.8.2.8. Mark all containers and documentation with ESP Code 7V. ESP Code 7V is used to help identify a ballistic missile OTL conducted IAW this instruction.

NOTE:

Strict compliance with container markings and documentation with ESP Code 7V ensures the wing is ultimately reimbursed for OTL movement charges. Wings are expected to budget for and ship components during OTL activites. Upon receipt of the TFC report, HQ AFSPC will evaluate OTL charges and reimburse units for OTL shipping charges, as required.

2.8.2.9. Use signature service on each shipment of OTL components to provide positive control throughout the shipping process.

2.8.2.10. Send shipping notification by priority message to all appropriate agencies.

2.8.2.11. TMO will initiate a report of shipment (REPSHIP) to enroute and Vandenberg AFB TMOs to ensure no in-transit delays occur. Transmit REPSHIP by message within two hours after the shipment departs the originating system.

2.8.3. Vandenberg AFB:

2.8.3.1. Through TMO, acknowledge receipt of shipment by message within 24 hours of arrival.

2.8.3.2. Identify appropriate equipment storage areas by OTL mission designator.

2.8.3.3. Upon receipt of unit shipping notifications, the 576 FLTS will establish close coordination with Vandenberg AFB Central Receiving and appropriate agencies to monitor arrival of components, suspense all inbound shipments, and follow-up with TMO on shipments not received by the established due date to include the initiation of tracer actions. 576 FLTS/TMOS will notify the LD of any late shipments.

2.8.3.4. Perform a QA receipt inspection and check for exterior damage to packaging of all OTL components. All RV/RS components may be opened by 576 FLTS munitions personnel upon receipt for inspection and processing. 576 FLTS personnel will open packages showing evidence of damage to determine the extent of damage. QA will use applicable T.O.s during inspection for damage and document results. QA will immediately notify the LD of discrepancies discovered during receipt inspection of OTL components and forward a copy of inspection results.

2.8.3.5. Have the 576 FLTS initiate action to replace components and/or explosive items not received, damaged, or found to be unserviceable. Prior to replacing components not received, the 576 FLTS will compare all available supply messages, receipt inventories, TEOs, etc., and notify the shipping agency and LD. Initiate tracer action through transportation channels to locate the missing property. For damaged shipments, items not shipped, or supply/transportation irregularities, the appropriate 576 FLTS agency will notify parent missile unit OG/LG, SWC/XRT, and the LD. No shipping action is required for minor/attaching hardware (nuts, bolts, etc.) which may be issued locally.

2.8.3.6. Process issue transactions for repair cycle assets to be expensed/consumed when the OTL mission concludes using demand code "K." This will preclude establishing DIFM details and the need for initial issue authorization.

2.8.3.7. Have the TM maintain a record of all OTL component changes for inclusion in appropriate test reports.

2.9. Movement Procedures:

2.9.1. Missile Stage(s) Movement Procedures:

2.9.1.1. Based on established movement dates, OO-ALC/LMSS, in coordination with the local TMO, will arrange transportation between the operational unit and Vandenberg AFB. 20 AF/LGM will assist as requested to ensure a coordinated effort between the operational unit and OO-ALC for all missile movements.

2.9.1.2. The operational unit TMO will comply with surface movement instructions of OO-ALC/LMSS for missile components. This may include Government Bill of Lading (GBL) preparation, citing OO-ALC second destination funds, and obtaining route orders from the Military Traffic Management Command (MTMC).

2.9.1.3. If airlift is not available for OTL missile movement to Vandenberg AFB, OO-ALC will arrange surface movement. The participating operational unit TMO will comply with OO-ALC/LMMS instructions on these movements. This may include GBL preparation citing OO-ALC second destination funds and obtaining route orders from the MTMC.

2.9.1.4. Before shipment, operational units will notify the LD of estimated departure time and ETA at Vandenberg AFB.

2.9.1.5. After missile stages depart from the operational unit to Vandenberg AFB, the operational unit Command Post will notify the 30 SW Command Post and 576 FLTS MMOC via telephone (TFC ensure 20 AF/LGM is notified by message) of the following:

2.9.1.5.1. Sortie identifier.

2.9.1.5.2. Aircraft tail number, rail car or truck number, as applicable. If by aircraft, include: Nomenclature and serial number of all components on the aircraft, air crew work time remaining at estimated time of arrival at Vandenberg AFB, and crew intentions upon arrival at Vandenberg AFB; (e.g., refuel, off load, or crew rest).

2.9.1.6. Operational unit TMOs will advise the 30 SW Command Post of all enroute delays as they occur. 30 SW Command Post will notify LD of any changes.

NOTE:

Strict compliance with the marking, handling, and notification instructions are mandatory to protect the integrity of operational test concepts.

2.9.1.7. 576 FLTS/TMOO will ensure 30 SW Treaty Office is notified IAW the Strategic Arms Reduction Treaty requirements prior to movement of any missile stage and after launch of test missile at Vandenberg AFB.

2.9.2. Post Boost Control System (PBCS) Movement Procedures:

2.9.2.1. Operational units will notify 576 FLTS by telephone of the transportation mode, all applicable documentation numbers, and estimated arrival date of each component concurrent with shipments of the guidance set(s). Follow up this telephone call with a message, Priority precedence, containing the same information. Send the message to 576 FLTS/TEM/TMO, OO-ALC/LMSS Item Manager, and 20 AF/DO/LG.

2.9.2.2. Use signature service on each shipment to provide positive control throughout the shipping process.

2.9.2.3. Stencil the following information on the outside of the containers at the time of packing (color to contrast with other markings. On stage containers, make the markings on the provided space on the right rear door):

Table 2.1. Markings.

OTL (At least 2-inch numbers and letters)
GT-xxx- (Sortie Identifier)
NOTIFY 576 FLTS/TMOO (At least 1/2 inch letters)
IMMEDIATELY UPON RECEIPT

2.9.2.4. Ship IMU tapes with their corresponding guidance set.

2.9.2.5. [Minuteman] Remove MGS batteries from the MGS and pack them in a separate container. Ship the primary MGS and MGS batteries with the downstage if airlift is available. If they must be shipped separately, assign transportation Priority 1. Prepare separate shipping documen-

tation for the MGS and MGS batteries even if they are shipped together. Ship IMU parameter tape with the MGS.

2.9.2.6. [Minuteman] The operational unit Technical Engineering Section will send a printed copy of the improved maintenance management program (IMMP) histories of the primary and back-up MGSs to 576 FLTS/TEEE. History prints will cover the period from MGS installation through shutdown for OTL. Ship MGS expanded maintenance data acquisition system (EMDAS) history with the MGS.

2.9.2.7. [Minuteman] To standardize expensing of MGS batteries, operational units should ship the batteries "maintenance to maintenance" (576 FLTS via DD Form 1149, **Requisition and Invoice/Shipping Document**). When requesting MGS batteries required to build up the replacement missile from host base supply, use ESP 7V to identify expense actions in support of OTL requirements. 576 FLTS will return unused MGS batteries to parent units.

2.9.2.8. [Minuteman] Ship the propulsion system rocket engine (PSRE) separately, transportation priority 1. The desired mode of shipment is via commercial carrier. Ship PSRE historical records with the PSRE "maintenance to maintenance" (to 576 FLTS Munitions) via DD Form 1149.

2.9.3. [Peacekeeper] LEGG Movement Procedures. Ship the LEGG intact to 576 FLTS at Vandenberg AFB.

2.9.4. RS Components And Ordnance Movement Procedures:

2.9.4.1. Ship all RV/RS components identified in the TEO to either the 576 FLTS/TMW Munitions Supply Account (FV 4610) or directly to 576 FLTS/TMW Bldg 1530 35th Street Vandenberg AFB CA 93437-5246. Ship all components transportation Priority 1. Use signature service on each shipment to provide positive control throughout the shipment process. Ensure ordnance is processed by a designated munitions inspector. Prepare RV/RS and LF ordnance for shipment IAW T.O. 11A-1-10, item T.O. and Code of Federal Regulations (CFR 49), part 177.848. Forward shroud rocket motor initiator will be removed for shipment IAW Department of Transportation directives and shipped separately due to compatibility concerns. Package the ordnance with the associated RV/RS and specify the location from which each was removed. Send all RS components in the same shipment. All RV/RS and ordnance historical and maintenance records, including the build up sheets, will accompany the items shipped to either the FV4610 or FB/FE4610 supply accounts. Provide copies of the RS build-up sheets to HQ SWC/XRT and SA-ALC/NWTB. In addition to required markings, the packing agency will stencil the following on the outside of all items packed for shipment to Vandenberg AFB (color to contrast with other markings):

Table 2.2. Markings.

OTL (At least 2 inch numbers and letters)
GT-xx (Sortie Identifier)
NOTIFY 576 FLTS/TMWO (At least 1/2 inch letters)
IMMEDIATELY UPON RECEIPT

2.9.4.2. The TFC will send a RS Components and Ordnance Movement Report (**Attachment 6**). Update the initial report as each subsequent shipment departs the operational base.

2.9.4.3. The 576 FLTS Munitions Flight is responsible for receipt and handling of all Munitions Supply Account (FV4610) nuclear ordnance commodity management (NOCM), conventional ordnance items, and /FE4610 controlled RV/RS components.

2.9.4.3.1. OTL items will not be repaired or replaced without direction from HQ SWC/XRT and the responsible engineering manager. Report RV/RS discrepancies noted during inspections or electrical tests to SA-ALC/NWT or OO-ALC/LMR (depending upon which ALC is responsible for the component), HQ AFSPC/DOTO/LGMW, HQ SWC/XRT and the LD. HQ SWC/XRT will determine OTL waiver or component replacement action. Should component replacement be directed by HQ SWC/XRT, the responsible ALC will provide shipping instructions for the defective component so additional testing or inspections can be accomplished.

2.9.4.3.2. The 576 FLTS will inspect, test, store, document, and issue all ordnance.

2.9.4.3.3. The FB/FV 4610 supply account, Vandenberg AFB, will initiate replacement action for all unserviceable ordnance or RS components.

2.9.4.3.4. During RV/RS build up and ordnance processing, QA will document discrepancies and forward copies of the report(s) to the task force, operational wing, 20 AF/DO/LG, HQ AFSPC/DOTO/LGMW, HQ SWC/XRT and 576 FLTS/TEM. Reference all discrepancies to the applicable T.O. and/or AFSPC publication depicting the standards required.

2.10. Maintenance Requirements:

2.10.1. Maintenance Activity Documentation:

2.10.1.1. Process and file historical maintenance documents generated during receipt-through-launch functions at Vandenberg AFB IAW 00-20 technical orders and AFI21-204 AFSPC1, ***Nuclear Weapons Procedures***. Dispose of all records IAW AFMAN37-139, ***Records Disposition Schedule***.

2.10.1.2. The 576 FLTS must perform records maintenance functions.

2.10.1.3. TFCs are responsible for expeditious processing of all maintenance documents to the 576 FLTS and are also responsible for the technical accuracy of information entered on maintenance documents.

2.10.2. Configuration Data. The TFC and LD will verify OTL missile configuration (major components and software) IAW TEOs. 576 FLTS/TEC will certify appropriate targeting data is issued to the task force, and the TFC will certify that those materials are used in targeting operations.

2.10.3. OTL Time Lines:

2.10.3.1. Maintenance scheduling should use the following guidelines for normal OTL activities:

Table 2.3. Guidelines.

Day 1	Selection and Part I tests
Day 2 through 12	Missile removal and shipment
Day 81 (MM)/102 (PK)	Task Force Arrival

Day 105 (MM)/140 (PK)	Launch

2.10.3.1.1. Ship [Peacekeeper] stages I, II, III, IV, and MGCS [Minuteman] booster, Post Boost Control System (PBCS), and MGS to Vandenberg AFB. Ship selected RV components as directed in the TEO.

2.10.3.1.2. Ship the guidance set and remaining RS components to Vandenberg AFB within 15 days of selection or as directed in the TEO.

2.10.3.1.3. Report any delay affecting alert readiness to HQ SWC/XRT and the LD.

2.10.3.2. At Vandenberg AFB, schedule task force maintenance team duty. Schedule additional workdays and/or shifts as necessary to meet OTL objectives/schedules without jeopardizing personnel or equipment.

2.10.3.3. Typical schedules for task force activities are contained in Atch 2. The actual schedule coordinated with the TFC from 576 FLTS/TMOS may vary based on mission requirements.

2.10.3.4. Surface transportation time lines from the operational unit are approximately 5 days by truck or 10 days by rail.

2.10.3.5. Vandenberg can accept only one missile delivery by aircraft per day. Schedule aircraft to arrive at Vandenberg AFB during normal airfield duty hours.

2.11. Requisition and Disposal of Supplies:

2.11.1. When the requirement is identified or 45 days prior to the need date, request those supplies necessary to reposture LFs selected for OTL. Process requests normally with one exception: use ESP Code 7V (Glory Trip).

2.11.2. Process serviceable assets at Vandenberg AFB after OTL launches as follows:

2.11.2.1. Turn in all items not to be returned to the operational unit to base supply at Vandenberg AFB.

2.11.2.2. Using current Serialized Control Asset Reporting System (SCARS) procedures, process those items (with Expendable, Repairable, Recoverable Cost Designator (ERRC) Designator XD1) to be returned to base of origin through the Vandenberg AFB Chief of Supply.

2.11.2.3. Using normal turn-in procedures (AFM 67-1, ***USAF Supply Manual***), process those items (with ERRC designator XD2) to be returned to base of origin through the Vandenberg AFB Chief of Supply.

2.11.2.4. Return end of quarter (TEOQ) type assets (EERC XB3/XF3) to base of origin and process them as "maintenance to maintenance" (DD form 1149, **Requisition and Invoice/Shipping Document)** shipments to preclude additional expensing upon receipt.

2.11.2.5. Process Equipping Authorized and in use Detail (EAID) accountable (ERRC NF2/ND2) assets IAW instructions issued by HQ AFSPC/LGSE when deployed from the base of origin.

2.11.2.6. Return RV/RS shipping boxes to the operational unit unless otherwise directed.

NOTE:

Any questions concerning the reorder of RV/RS components should be directed to HQ AFSPC/LGMW.

2.12. Reporting:

2.12.1. Reporting is essential for effective OTL program management as well as for accurate evaluation of weapon system performance. Transmit all unclassified messages for Glory Trip missions Encrypt for Transmission Only (EFTO). Reporting requirements encompass two primary areas: status of program events and the detailed information following completion of each event. Data must be acquired during the alert readiness period, countdown, launch, and flight through impact. 576 FLTS will provide an initial analysis of flight performance via the Launch Notification Message, Kwajalein Missile Impact Scoring System report and a Performance Report covering the entire operation.

2.12.2. Glory Trip Task Force/Giant Pace Key Personnel Message (**Attachment 3**). For each OTL exercise, the operational unit will send a Glory Trip Task Force/Giant Pace Key Personnel Message identifying key personnel not later than five days after receipt of the implementing TEO. Key personnel are: The TFC, Operations Officer, Maintenance OIC, and the Maintenance NCOIC.

2.12.3. Task Force Authorization/Notification Roster This roster will include, among other things, the task force members' security clearances and EWO/code handling status. This roster will give the task force members access to Vandenberg AFB facilities for OTL purposes. **Attachment 4** contains information to complete this form.

2.12.4. OTL Status Report (**Attachment 5**). The TFC is responsible for reporting OTL status and schedule changes. The unit must prepare an initial report at the completion of Part I. Updates to the initial report are required after Parts II and III, and if schedule changes occur.

2.12.5. OTL RS Components and Ordnance Movement Report (**Attachment 6**). The unit is responsible for reporting the status of all RS components and Ordnance movements for hardware associated to each OTL. Updates to this message may be required if there is a delay in component movement dates or additional shipments are required.

2.12.6. OTL Component Damage Report (**Attachment 7**). The TFC will report any damaged or defective components discovered during the OTL process. This includes any components (e.g. RV body sections) damaged or defective but not sent to PANTEX or Vandenberg AFB.

2.12.7. OTL Mission and Scoring Report (**Attachment 8**). This report is the first transmission of information on results of a Glory Trip operation. The 576 FLTS will issue Parts I and II (UNCLASSIFIED) of this report using routine precedence, NLT 8 hours following the launch. If a mission results in an abort or a flight anomaly with no score provided by downrange sensors, issue the report within 6 hours of abort/anomaly and transmit using immediate precedence. The report will provide background information for nominal missions. The 576 FLTS will issue final RV scores using Part III (CLASSIFIED) of this report for a nominal missile at launch +7 days for a Kwajalein Missile Impact Scoring System only scored mission or launch +14 days for a launch involving Splash Detection Radar scored missions. For other than nominal missions, report the fact there was a failure and if destruct commands were/were not issued. Only addressees with a need-to-know will be informed of failure modes through LAG Reports.

2.12.8. OTL LAG. A LAG Report is required whenever there is an identified major anomaly. While a launch analysis/investigation is ongoing, the 576 FLTS will publish periodic LAG status messages

as information becomes available. Transmit follow-up reports with a routine precedence. 576 FLTS will prepare a final LAG Report when an investigation is complete. The 576 FLTS, in coordination with HQ AFSPC/DOTO/SE and HQ SWC/XRT IAW AFI 91-204 and HQ AFSPC/SE-002 will determine distribution of LAG reports, ensuring only those agencies with a need-to-know are addressed.

2.12.9. OTL Performance Report (**Attachment 9**). The 576 FLTS will prepare a composite report of the operational test exercise from missile selection through impact/termination. This report will be submitted to HQ SWC within 60 days following last data receipt from the launch. This report serves as AFSPC's evaluation and historical record/document of the OTL. It is intended to be a timely, basic missile and ground system performance report for each OTL mission.

2.12.9.1. The TFC, LD, ICBM SPO and OTL contractor support personnel will provide inputs for each performance report. TMs will furnish test reporting instructions to the TFC prior to his/her departure from the operational unit to permit early reporting of Part I activities/results.

2.12.9.2. As a minimum, reports will include the following:

2.12.9.2.1. A recap of all mission directives, TCTOs, etc.

2.12.9.2.2. All activities during Part I and II conducted at the operational unit along with all problems encountered, failures, and component replacements.

2.12.9.2.3. All activities in Parts II, III, and IV at Vandenberg AFB, including all problems encountered, failures, and component replacements.

2.12.9.2.4. Data on basic performance of ground missile systems and airborne instrumentation systems during the launch include: Predicted versus actual launch and flight event times to include ALCS events, terminal countdown, boost, and post boost phases and RS events, as applicable.

2.12.9.2.5. Analysis of weapon system and instrumentation performances. Include a discussion of significant anomalies, failures, or deficiencies. In addition, include recommended corrective actions within capabilities of the 576 FLTS.

2.12.9.2.6. RV impact scoring summary. Compare this to the test range CEP for each mission.

2.12.9.2.7. Instrumentation coverage by the test range.

2.12.10. To be an effective measure of operational capabilities, OTL activities must be representative of the deployed force. Therefore, performance reports must contain comments on all events and actions during the entire mission which could affect operational realism for each test. This includes comments on procedures, personnel actions, and missile system performance.

2.12.11. OTL TFC's Report (**Attachment 10**). This report is a brief journal of operations and maintenance activities from missile select through launch. Include any significant problems with the support of task force activities such as quality and timeliness of support actions, status of MAF and LF at turnover, etc. Include unit OTL working group recommendations. The TFC will submit this report within 20 calendar days after return to home station.

Chapter 3

SIMULATED ELECTRONIC LAUNCH

3.1. General. SEL is the testing of ICBMs in their deployed environment at operational bases without actually launching them. SEL tests the deployed ICBMs from day-to-day operation to issuance of [Minuteman]: first stage ignition [Peacekeeper]: launch eject gas generator (LEGG) ignition signal. SEL test activities provide reliability data for the ICBM weapon system. SELs also provide a means for USSTRATCOM to demonstrate USCINCSTRAT end-to-end connectivity and command/control of ICBM forces.

3.1.1. SEL LCCs and LFs are electrically isolated [WS-133B]: also radio isolated from an operational squadron of Minuteman/Peacekeeper ICBMs and specially configured for safety to allow testing of all critical commands in the deployed environment. [WS-133AM]: 11 LFs and 2 LCCs are tested. [WS-133B]: 10 LFs and 2 LCCs are tested. [Peacekeeper]: 3 LFs and 2 LCCs are tested.

3.1.2. Headquarters AFSPC:

3.1.2.1. Appoint a program officer to provide overall SEL management, direct the implementation of specific missions, and ensure test results satisfy AFSPC test objectives. The office of primary responsibility for ICBM SEL is HQ AFSPC/DOTO.

3.1.2.2. Publish a TO every two years defining SEL test objectives and agencies tasked to support the program.

3.1.2.3. Budget for and direct disbursement of funds to support and conduct the SEL test program.

3.1.2.4. Determine priority of test objectives.

3.1.2.5. Approve TOs and TOAs.

3.1.3. USSTRATCOM:

3.1.3.1. Coordinate on ALCC support requests and forward requests to appropriate agencies for tasking.

3.1.3.2. Provide preparatory launch command-alphas (PLCA) for use during SEL tests.

3.1.3.3. Coordinate requests to conduct USCINCSTRAT end-to-end connectivity and command/control demonstrations.

3.1.3.4. Provide code material as requested for SEL testing.

3.1.3.5. Provide two qualified ALCS Operations officers to serve as MCCM Airborne for all SELs.

3.1.4. HQ SWC:

3.1.4.1. Assign program officers as the primary point of contact for coordination and review of ICBM FDE matters for SEL testing. Assign RTA responsibilities to appropriate test agency. The day-to-day program management of ICBM SEL is the responsibility of HQ SWC/XR.

3.1.4.2. Provide an annual ICBM test forecast containing mission identifier, missile unit, test timelines and key test dates.

3.1.4.3. Develop and distribute a TEO for each SEL test, as required. This document will contain mission specific requirements each participating unit must accomplish to ensure mission success. Amendments to the TEO will be published and distributed to participating units as required.

3.1.4.4. Provide technical assistance in support of testing and technical support for maintenance deficiencies.

3.1.4.5. Request ALCC support through USSTRATCOM.

3.1.4.6. Act as final approval authority for test-related waiver requests.

3.1.4.7. Approve SEL program requirements document and operational requirements document.

3.1.4.8. Approve Test/Annual Reports.

3.1.5. 20th Air Force:

3.1.5.1. Ensure completion of SEL requirements at the assigned missile units.

3.1.5.2. Prepare and publish implementing instructions to supplement this instruction.

3.1.5.3. Act as waiver authority of operational T.O. steps during Parts I (alert readiness test), II (SEL posturing), and IV (SIOP reposturing) after coordination with HQ SWC/XRT and HQ AFSPC/DOTO.

3.1.5.4. Provide assistance to ensure subordinate units comply with the provisions of this instruction.

3.1.5.5. Designate a TC-A to be the focal point for all ALCC activities for SELs.

3.1.5.6. Provide JPIC to remove LFs from SIOP alert to support SELs and required target materials.

3.1.6. ICBM System Program Office (OO-ALC):

3.1.6.1. Maintain and assure operability of SEL test equipment and the ALCC mobile instrumentation facility (MIF).

3.1.6.2. [Simulated Electronic Launch-Minuteman (SELM)]: Arrange for transportation and delivery of loaded SELM mobile test unit (MTU) to and from the missile units.

3.1.6.3. Provide on-site technical advice to AFSPC and missile units during the test.

3.1.6.4. Participate with AFSPC in anomaly/failure analysis to include resolving test related problems beyond unit capability during all parts of SEL testing.

3.1.6.5. Provide System Engineering Level Evaluation Correction Team (SELECT) support to any Anomaly Analysis Team (AAT) formed by the unit commander. This support is mandatory for any anomaly after issuance of critical commands. SELECT will also review and provide comments on the TPA and perform any special tests as required.

3.1.6.6. Conduct detailed anomaly analysis of all anomalies/failures not resolved by the AAT and report results to HQ AFSPC/DOTO/LGML, HQ SWC/XRT and the 576 FLTS.

3.1.6.7. Develop and maintain T.O.s for SEL testing.

3.1.6.8. Provide ALCC MIF for airborne test day of each SEL test. The MIF will have capabilities to analyze real-time and recorded ALCC ultra high frequency (UHF) commands. The MIF and technicians to operate it will arrive at the test unit at least 24 hours prior to airborne test.

3.1.6.9. Provide training on installation and use of SEL equipment to unit training personnel as required prior to the start of each SEL test.

3.1.7. The 576 FLTS:

3.1.7.1. Act as responsible test agency for the SEL program.

3.1.7.2. Publish a TP, valid for two years from date of publication, defining the objectives and standards for conducting test activities.

3.1.7.3. Provide a Test Director who will ensure 576 FLTS test management responsibilities are accomplished and is responsible for:

3.1.7.3.1. Maintain responsibilities for test conduct according to the TO, TOA, TP, TPA, SEL T.O.s and this instruction.

3.1.7.3.2. Coordinate with HQ SWC/XRT on non-SEL specific normal maintenance after Alert Readiness Testing and providing these instructions to the TC.

3.1.7.4. Provide and train a Test Manager (TM) who will do the following:

3.1.7.4.1. Be the technical advisor to selected missile unit on SEL issues.

3.1.7.4.2. Write the test sequence document (TSD).

3.1.7.4.3. Review and coordinate on all unit maintenance and operations lesson plans.

3.1.7.4.4. Assist the SEL test support manager (TSM) in directing all aspects of SEL testing.

3.1.7.4.5. Write the performance report detailing test conduct and results.

3.1.7.4.6. Coordinate with unit TSM and 576 FLTS TD on all non-SEL specific normal maintenance required after Alert Readiness Testing.

3.1.7.4.7. Conduct a pre-test briefing to the missile unit prior to each SEL test.

3.1.7.4.8. Ensure all reports are accomplished as directed by this instruction.

3.1.7.4.9. Act as waiver authority for SEL test objectives as outlined in Chapter 1.

3.1.8. Space Wings:

3.1.8.1. Be responsible for the safe and timely conduct of SEL tests at their unit.

3.1.8.2. Provide operations and maintenance personnel to develop SEL lesson plans, train and schedule personnel to support the test, deposture and posture LCCs and LFs, and perform all operational test activities.

3.1.8.3. Designate a Lieutenant Colonel as the SEL TSM who will be directly responsible for the conduct of the test. (Direct waivers on this requirement to HQ AFSPC/DOT). The SEL TSM will:

3.1.8.3.1. Conduct test activities in a manner that will provide for safe, timely, efficient, and economical accomplishment of the test.

3.1.8.3.2. Exercise overall unit management and control of all test activities.

3.1.8.3.3. Approve all maintenance activities (both SEL and normal maintenance) at all test facilities from completion of alert readiness tests through test completion.

3.1.8.3.4. Ensure accomplishment of and compliance with this instruction, the implementing TEO and TP, SEL technical data, and weapon system safety rules.

3.1.8.3.5. Act as approval authority, in conjunction with the TM, for the TSD.

3.1.8.3.6. Review and coordinate on all unit maintenance and operations SEL lesson plans.

3.1.8.3.7. Ensure QA verification of SEL test LF configuration prior to guidance set start-up.

3.1.8.3.8. Ensure QA and/or SEL maintenance officer accomplishes Last Look Inspections of each test facility (LF and LCC) to verify the SEL configuration to include proper configuration of RS/RV, proper installation of RS/RV simulators, required missile safing, proper installation of SEL test equipment, and proper isolator installation.

3.1.8.3.9. Prepare and conduct a test readiness review board (**Attachment 13**) to the wing commander. The purpose of this briefing is to review preparation activities, provide an overview of countdown activities, assure all operations, maintenance, and safety requirements have been complied with, and provide an overview of anomaly analysis procedures.

3.1.8.3.10. OSKE write the classified annex to the TSD.

3.2. Preparation Procedures:

3.2.1. HQ AFSPC/DOTO publishes the TO and TOA, as required. The 576 FLTS will issue a TP and TPA, if required, approximately 22 weeks prior to each test. These documents detail specific test requirements.

3.2.2. Fifteen weeks prior to test week, the space wing commander will appoint a SEL TSM. Written notification of appointment will immediately be made to HQ AFSPC/DOTO/LGML, 20 AF/DO/LG, HQ SWC/XRT and 576 FLTS/TEM.

3.2.3. The SEL TSM forms a SEL Working Group and begins planning for SEL activities to include: posture/deposture; personnel training and development of lesson plans; procurement of supplies; and receipt of required SEL equipment from OO-ALC in the MTU. Prepare and publish the operations order prior to first test LF deposture. Send a copy of the unit operations order to HQ AFSPC/DOTO, 20 AF/DO/LG, HQ SWC/XRT and 576 FLTS. Brief unit staff on all phases of the planned operation.

3.2.4. The 576 FLTS TM will develop a TSD for controlling all test activities during last line isolation, isolation verification, and Part III (launch demonstration). This document will integrate: SEL and weapon system T.O. procedures; Weapon System Safety Rules; and AFSPC directives. It is a written schedule of events, actions, responses and expected indications, status displays and results. It must contain demand response, step-by-step actions for: last line isolation verification; ground/airborne test preparation and isolation verification; ground/airborne incremental test commit actions; on-site test evaluation; emergency actions for safety related anomalies; contingency actions for conducting the airborne test by ground LCCs; anomaly analysis actions; squadron interconnectivity restoration; and special procedures, if required. Distribute the draft TSD eight weeks prior to the test.

3.2.4.1. If the TSD requires an exercise message from USSTRATCOM during any test increment the following procedures will apply. 20 AF/DOME will request exercise messages required by

EAP-STRAT Volume VII, chapter 6. Exercise message request procedures are set out in EAP-STRAT Volume XII.

3.2.5. Fourteen weeks prior to test week, operations and maintenance training personnel should begin developing SEL operations and maintenance lesson plans based on Weapon System Safety Rules, SEL T.O.s, TEO, and this instruction. The SEL TSM and 576 FLTS TM must review and coordinate on the final lesson plans to ensure SEL test requirements are met.

3.2.6. Approximately eight weeks prior to test week, an OO-ALC representative and the SELM MTU, containing SELM test equipment, will arrive at the tasked wing. Simulated Electronic Launch-Peacekeeper (SELP) equipment will be stored at F.E. Warren AFB. The Ogden representative will provide an overview of SEL configuration and maintenance procedures to key unit training personnel. This overview in no way relieves unit personnel of their responsibility to develop and implement a training program based on appropriate technical data, safety rules and AFSPC directives. The OO-ALC representative will also review maintenance lesson plans.

3.2.7. Also approximately eight weeks prior to test week, the 576 FLTS will present a pretest briefing to the unit senior staff and SEL working group.

3.2.8. The SEL TSM and appropriate members of the working group will develop a schedule for deposturing sorties for SEL, bringing them to SEL alert and returning them to SIOP alert after Part III. This schedule should be sent to the 576 FLTS six weeks prior to test week. After SEL TSM and 576 FLTS TM approval of the deposture/reposture schedule, 20 AF will provide JPICs before removing/returning sorties from/to SIOP alert. To minimize SIOP impact, USSTRATCOM may direct the sequence of sortie deposture/reposture. According to the Generation and Targeting-ICBM (GATI), sorties may be depostured [SELM]: 19 [SELP]: 12 calendar days prior to the date set out in the JPIC. Sorties are also repostured according to information contained in the JPIC, usually NLT [SELM]: 19 [SELP]: 12 calendar days after the final test day.

3.2.9. The 576 FLTS TM will arrive at the unit at least [SELM]: four [SELP]: three weeks prior to test week and will have the TSD in final draft form upon arrival. The unit SEL TSM and 576 FLTS TM will finalize the TSD and distribute approved final copies at least two weeks prior to test week.

3.2.10. Host units will conduct training for all personnel involved in the SEL test. Training will include, but not be limited to, a thorough review of applicable provisions of this instruction, the SEL T.O., Weapon System Safety Rules, unit operations order, the TOA, the TPA; special procedures for conducting the test; code component control requirements; test organization and management; and test complex configuration.

3.2.10.1. Only certified MCCs will be selected and trained to support the SEL test.

3.2.10.2. All maintenance personnel involved in the SEL test will meet training requirements. Maintenance teams performing special test procedures will be thoroughly trained and certified in test unique procedures.

3.2.10.3. Specific training requirements for SEL personnel are outlined below.

3.2.10.3.1. If possible, unit key personnel should observe a SEL test at another unit. This serves as familiarization and training on SEL procedures.

3.2.10.3.2. Maintenance teams penetrating a SEL configured LF for any reason except for emergency situations must be SEL trained.

3.2.10.3.3. Train quick reaction maintenance (QRM) teams on standby in the test squadron and non-test squadrons during Part III on emergency shutdown procedures [SELM]: and SELM control monitor printer tape records [SELP]: and SELP Data Acquisition System procedures.

3.2.10.3.4. Train operations and maintenance personnel on duty in the test LCCs and LFs on test countdown operations, TSD use, reporting, anomaly procedures, emergency procedures, and code control requirements encountered during testing phases.

3.2.10.3.5. Operations personnel on duty in non-test LCCs must be trained in test countdown operations, TSD use, reporting, and emergency procedures.

3.2.10.3.6. The AAT must receive training in anomaly investigation/analysis procedures prior to initiation of Part III activities.

3.2.11. Clear all unaccomplished TCTOs that would affect a SEL test prior to initiation of SEL testing (Part I). Do not repair maintenance discrepancies that would not cause a test sortie to be declared off-alert to ensure a successful test. As long as test activities can be conducted safely, allow those discrepancies to remain to ensure a test representative of the deployed force.

3.2.12. Units conducting a SEL test are the command's "most knowledgeable resource" for identifying SEL T.O. deficiencies and assuring SEL T.O.s are compatible with weapon system operations and maintenance technical data. In order to assure adequacy of SEL technical data, units will:

3.2.12.1. Conduct a complete review of the SEL T.O. approximately 13 weeks prior to test week. Submit Urgent AFTO 22s if changes are not needed until commencement of SEL posturing or Emergency AFTO 22s if changes are required prior to commencement of SEL posturing.

3.2.12.2. Submit changes through normal channels. Provide information copies to 20 AF/DO/LG, SWC/XRTM, 576 FLTS/TEM, and OO-ALC/LME/SELECT.

3.2.13. Part I - Alert Readiness Test. Approximately one week prior to the start of scheduled SEL posture, the 576 FLTS TC will verbally direct an alert readiness test (ART) to each test facility. These tests check most functions that would prevent launch if a malfunction occurred and provides a base-line evaluation of each facility and missile prior to maintenance activities for SEL posturing.

3.2.13.1. Designated tests will be addressed to each test LF by the parent LCC and include:

3.2.13.2. [WS-133AM/WS-118A]: Sensitive command network test.

3.2.13.3. [WS-133B]: Ground systems test. 50 percent by cable and 50 percent by medium frequency (MF) radio.

3.2.13.4. Missile Test. [WS-133B]: 50 percent by cable and 50 percent by MF radio.

3.2.13.5. Enable Test. [WS-133B]: 50 percent by cable and 50 percent by MF radio.

3.2.13.6. If a missile fails to successfully complete ART, correct malfunctions and re-accomplish ART.

3.2.13.7. Retain a detailed record of each command and all system responses including appropriate printer tapes/crew logs for both normal and abnormal indications for inclusion in the final test report.

3.2.13.8. After ART is complete, submit a SEL Status Report (**Attachment 12**).

3.2.14. Part II - SEL Posturing:

3.2.14.1. Configure test facilities for SEL as specified in appropriate SEL T.O.s and TPA by SEL trained maintenance teams. QA personnel must observe/verify all test LF/LCC deposture activities.

3.2.14.2. Normal security procedures will apply for all test facilities throughout the entire deposture, test and reposture period.

3.2.14.3. Plans and Scheduling and MMOC must ensure maintenance teams dispatching to SEL LFs are SEL trained, SEL work orders are properly marked, and maintenance discrepancies are not repaired just to ensure a successful test.

3.2.14.4. Do not perform maintenance solely to ensure a successful test. After completion of ART, (and subsequent start-up in SELM/SELP configuration), each LF will be secured and treated as if it were an EWO facility. Normal weapon system maintenance will be performed. However, all maintenance must be accomplished by appropriately trained SELM/SELP qualified maintenance teams. TSM and TM must review all maintenance actions performed upon completion of maintenance. Deviating from this procedure could invalidate the test results for that LF. Clear any discrepancies/deficiencies found after the test during SIOP reposture.

3.2.14.5. Remove and return to base the RS at any LF where the following will occur: LF ordnance will be expended, only one LCC is used in the test configuration, or an anomaly occurs that is nuclear safety related.

3.2.14.6. Test LFs will be modified by installation of the SEL equipment. SEL qualified personnel will:

3.2.14.6.1. Install RS/RV simulators.

3.2.14.6.2. Accomplish isolation IAW the appropriate SEL T.O.

3.2.14.6.3. Replace all critical component operational codes, except the secure data units and hardened intersite cable network keying variables, with test codes. LCCs, LFs, and ALCC are configured with EXCLUDED test codes (except Peacekeeper SCDs).

3.2.14.6.4. Electrically isolate test LCCs and LFs [WS-133B only]: and MF Radio from the remainder of the operational squadron.

3.2.14.6.5. Verify electrical [WS-133B only]: and MF radio isolation using SEL T.O. and TSD isolation verification procedures.

3.2.14.6.6. Install a lockpin assembly in the safety control switch for all test missiles until directed to remove by the unit TSM or TM. [SELM]: Install missile safing pins in the test missiles.

3.2.14.6.7. Unit QA personnel will verify the proper configuration of each test site prior to MGS/MGCS start-up.

3.2.14.6.8. Target test missiles with normal target assignments/execution plans and bring to SEL alert.

3.2.14.7. SEL provides capabilities to actually activate or simulate activation of the following LF ordnance fired devices: launcher closure door, [SELM]: missile suspension system articulating

arms, upper umbilical critical leads disconnect, guidance & control umbilical release and retract; MGS battery, and [SELP]: vertical shock isolation system (VSIS).

3.2.14.8. One launcher closure door every other year is normally activated. When a launcher closure door is activated, the unit will construct an arresting barrier per SEL T.O. to restrain the launcher closure door at that LF only. Simulate launcher closure door activization at all remaining test LFs.

3.2.14.9. [SELM]: Critical leads disconnect, MGS umbilical release and MGS umbilical retract ordnance, and the missile suspension system lateral restraints will normally be activated at two LFs per test. This event will be simulated at all other test LFs.

3.2.14.10. [SELM]: Do not expend MGS batteries on SELM tests unless special testing is required. Remove all MGS batteries. The portion of TCD which normally occurs on airborne power will take place using a ground power source allowed by SELM MGS Battery By-Pass procedures. When actual activation of the MGS battery is required for a special HQ AFSPC directed test, remove expended MGS battery from the MGS, place it in an approved storage container and await disposition instructions from HQ SWC/XRT.

3.2.14.11. Following MGS/MGCS start-up in SEL configuration, secure each test facility. Conduct all maintenance at SEL alert test facilities by using appropriately trained SEL qualified maintenance teams. No teams will dispatch to a SEL LF without notification to SEL TSM or TM.

3.2.14.12. After all test facilities are postured to SEL alert submit a SEL Status Report (**Attachment 12**).

3.2.14.13. Handle test LFs which are to operate on LF emergency power during SEL commit as follows:

3.2.14.14. Place LFs designated in TPA in the LF emergency power mode IAW the appropriate SEL T.O. These LFs will be left on emergency power at least 15 hours, but less than the T.O. 21M-LGM30F-102 system emergency survivability period. If T.O. -102 emergency survivability period is less than 15 hours immediately notify the unit TM and TC. Do not, for any reason, allow LF to be left on emergency power in excess of the T.O. -102 system emergency survivability period. Do not test LFs on emergency power if previously on batteries for an extended period of time. During test activities, do not allow the batteries to discharge below T.O. limits.

3.2.14.15. After the LF has been placed on emergency power, accomplish a storage battery output voltage check IAW appropriate SEL T.O. hourly. Additionally, accomplish a storage battery output voltage check just prior to execution and just after TCD. The TSD will contain necessary steps to verify the LF is on emergency power and for an on-site test evaluation team (TET) to report voltage readings at prescribed times.

3.2.14.16. MCCs at test LCCs must continuously monitor the "SEL Ready" status [WS-133AM]: Ground Maintenance Response (GMR) 15; [Peacekeeper]: GMR 23; and [WS-133B]: Auxiliary Status Response (ASR) 377/Maintenance Status Response (MSR) 567 from start-up to SEL alert through key turn. Loss of SEL ready status requires immediate dispatch of SEL trained maintenance personnel to determine the cause.

3.2.14.17. Unit personnel will conduct a Last Look inspection of each test LF and LCC prior to the readiness review and Part III activities. A team composed of a SEL qualified QA personnel, the SEL maintenance officer, and other personnel designated by the unit commander will conduct

this inspection. The purpose of this inspection is to verify proper connection of all SEL test equipment, proper safing of applicable AVE, proper installation of all SEL cables, proper installation of isolators, and proper installation of RS/RVs (RS/RV removed or electrically disconnected from the MGS and [SELM] mechanically mated to the SELM spacer) at the test LFs. The Last Look team will also verify command line removal at WS-133AM secondary test LCCs and isolator plug installation at WS-133B and WS-118A test LCCs. If for any reason a maintenance team penetrates a test LF after Last Look Inspections are accomplished, another Last Look Inspection must be accomplished.

NOTE:

The SEL maintenance officer and SEL QA maintenance technician may accomplish a Last Look inspection for components within the launch tube prior to a scheduled Last Look inspection for that site. At that time they may seal the launch tube access with a signed/dated paper label (seal). During Last Look inspections, they may verify integrity of the launch tube configuration by verifying this seal is intact. If a seal is not intact or has been tampered with, they must reaccomplish the launch tube portion of a Last Look inspection.

3.2.14.18. Upon completion of test preparation and prior to test countdown operations, the SEL TSM will conduct a Test Readiness Review Board (TRRB) to the unit commander. This TRRB will serve as a certification to the unit commander that all operational, logistical and safety requirements within instructions, TEO, SEL T.O., weapon system T.O.s and Weapon System Safety Rules have been complied with. The TRRB will consist of a brief program presentation and certification of readiness by responsible project officers. As a minimum, the following personnel or their designated representative must verbally certify their respective actions are complete and are ready to conduct the test: SEL TSM, TM (TM is considered the SWC representative), test conductor-airborne, safety, maintenance officer or person who actually accomplished Last Look Inspections, Weapons and Tactic flight representative, OG/CC and LG/CC. The unit commander and the SEL TSM will then sign a certification statement certifying the unit is ready to conduct the test.

3.2.14.19. Last line isolation, isolation verification and count down dry run will normally be accomplished on the Friday prior to test week. Prior to last line isolation, all SEL sorties must be SEL configured and verified (Last Look inspection accomplished). If a sortie was SEL configured but is now off alert due to subsequent maintenance, last line isolation may proceed with a subsequent Last Look inspection after maintenance is complete. If a sortie has not been SEL configured due to maintenance scheduling delays, etc., delay last line isolation.

3.2.15. Part III - Launch Demonstration. Part III begins with the initiation of isolation verification on either airborne or ground test day and ends with confirmation of successful terminal countdown (TCD) by either on-site maintenance evaluation teams and SEL test equipment.

3.2.15.1. Actual SEL testing is divided into two separate phases: airborne test and ground test. [SELM]: Normally, 50% of the test sorties will be incrementally simulated launched by MCCs from an ALCC on the first test day. This will be followed by a down day with no testing. Then on the second day, MCCs in the LCCs will incrementally simulate the launch of remaining sorties. [SELP]: Airborne and ground test are on the same day. All activities during this phase will be controlled by the unit SEL TSM through the TM using approved TSD procedures. All activities must be closely coordinated, timed and controlled and will not be scheduled without prior coordi-

nation with 576 FLTS TM. Part III is designed to provide launch reliability data points for SIOP planning. The TSD will incorporate requirements of SEL T.O.s, weapon system T.O.s, weapon system safety rules, Operations Orders, TOA and TPAs. This document will ensure orderly and safe preparation, launch countdown, emergency response, test evaluation and anomaly investigation. Make maximum use of standard T.O.s and operating procedures to enhance operational realism.

3.2.15.2. For SEL tests, sorties are scored only on the basis of launch reliability (LR). LR is a probability an ICBM will launch the first time directed. During SEL tests LR begins and ends with the first and last critical command (hot time PLC, Enable, or Execute Launch Command). This process begins with the first critical command and ends with TCD or last critical command for each test increment. SEL sorties will be scored using criteria in the SEL Reporting Section of this instruction.

3.2.15.3. SEL TMs will exercise overall management and control of the test countdown. The SEL TSM with concurrence from 576 FLTS TM and SWC Program Officer has authority to delay and/or reschedule the test countdown when in his/her judgment:

3.2.15.3.1. Nuclear, missile, or ground safety will be compromised.

3.2.15.3.2. Test activities will interfere with the wing mission in support of the SIOP.

3.2.15.3.3. The accomplishment of primary or special test objective is jeopardized.

3.2.15.4. All decisions affecting a test countdown will come from the SEL TSM, or will be passed to him/her from higher authority to be communicated to test elements concerned. SEL TSMs will direct countdown activities through the 576 FLTS TM by means of the TSD. All actions having reference to the SEL T.O. will be mandatory, whether of a routine or emergency nature. Include in the TSD detailed instructions for emergency and/or "back out" actions to be performed in case certain contingencies other than those requiring specified mandatory responses are encountered. The unit commander, or his/her designated representative and 576 FLTS TM and SWC Program Officer will confirm all decisions to hold, reschedule or continue the test.

3.2.15.5. As specified in the TSD, safety, security police and other required personnel will be in position for immediate response to any contingency. Do not accomplish critical commands until all required teams are in their designated positions.

3.2.15.6. At test LFs where ordnance activation is being simulated (all SEL Test Set Ordnance Activation switches in SIMULATE position), maintenance test evaluation team (TET) need not be present at the site during Part III. However, the unit must have sufficient teams on standby to retrieve SEL Test Set printouts from unmanned test LFs and conduct a quick-look inspection within 24 hours of TCD. Place a TET at test LFs where ordnance is being activated (any SEL Test Set switches in the ACTIVATE position). This team will be stationed topside or in the LER at LFs where the launcher closure door is not being exercised and maintain communication with the MCC. For LFs exercising the launcher closure, TETs will ensure all personnel exit LF fenced areas and maintain site security from the LF access road. TETs will make a quicklook inspection of SEL equipment and the test LF IAW SEL T.O.s to determine TCD success. Immediately report out of tolerance conditions either from test set printouts or visual inspections of hardware (ordnance devices or weapon system hardware) to the SEL TSM. Do not take further action, except in an emergency situation, until SEL TSM direction is received.

3.2.15.7. Dispatch QRM teams on standby to each non-test MAF (four MAFs, one team per MAF) on ground and airborne test days. Place one additional QRM team at each additional non-test squadron [WS-133AM/118A]: on airborne test day [WS-133B]: on both ground and airborne test days. QRM teams must be trained on site safing and emergency shutdown procedures and capable of responding to and safing any LF exhibiting an unsafe condition.

3.2.15.8. Dispatch an Anomaly Analysis Management Team (AAMT), composed of a maintenance officer, technical engineer, and QA person to the primary or secondary test LCC. The AAMT must be trained on anomaly analysis procedures. Dispatch the AAMT to test facilities as required to assist in anomaly analysis.

3.2.15.9. After isolation verification has assured that test missiles and all supporting personnel, equipment and facilities are ready for execution, SEL TSMs with concurrence of the TM and SWC Program Officer, will advise the unit commander and request permission to proceed with test activities.

3.2.15.10. MCCs in the test LCC(s)/ALCC will accomplish enabling and commit as directed by the 576 FLTS TM. If applicable, the SEL TSM will direct the TM and MCCs to initiate appropriate emergency actions IAW TSD emergency procedures checklists anytime there is an indication of a nuclear safety or weapon system safety rules violation.

3.2.15.11. SEL TSMs will remain in the Test Command Post to coordinate test activities, quicklook analysis efforts and direct various recovery activities. After simulated launch of an ordnance site, do not execute further increments until a quicklook analysis for that ordnance site is complete. Additionally, quicklook analysis will be accomplished at the end of each test day and any other time abnormal status indications warrant.

3.2.15.12. During testing periods on airborne and ground test days, the following applies to facilities configured for SEL testing:

3.2.15.12.1. Security police will not conduct any security reaction exercises.

3.2.15.12.2. Do not schedule any maintenance.

3.2.15.12.3. Ensure no test or non-test sorties in a test squadron (except as directed by the TSD) are in calibration within the 6 hours prior to commencing test activities.

3.2.15.12.4. After airborne/ground test day is complete submit a SEL Terminal Countdown Report (**Attachment 15**).

3.2.16. Part IV - SIOP Reposturing:

3.2.16.1. Reposture test facilities to SIOP alert as specified in SEL and maintenance T.O.s .

3.2.16.2. [SELP]: During reposture activities and prior to RS remate, accomplish a Unique Signal Device Assembly (USDA) Connectivity Test (UCT) at the LF where ordnance was expended. Conduct the UCT according to SELP T.O. Provide results of UCT in the SEL Status Report after all test facilities have been returned to SIOP alert.

3.2.16.3. Reposture test facilities to SIOP alert NLT date/time specified in TEO and JPICs (normally within [SELM]: 19 [SELP]: 12 calendar days of completion of Part III).

3.2.16.4. Return SEL equipment to base where the unit will inspect and document equipment condition. Load SELM equipment into the SELM MTU and ship as directed by OO-ALC/ LMER-SELM. Store SELP equipment at F.E. Warren AFB.

3.2.16.5. After all test facilities are repostured to SIOP alert, submit a SEL Status Report (Atch 12). [SELP]: Include results of UCT.

3.2.17. Anomaly/Failure Analysis:

3.2.17.1. Unless waived by the SWC/CC or designated representative, immediately implement an anomaly/failure analysis for failure to achieve test objectives due to hardware/software anomalies, for countdown aborts, or for significant anomalies occurring during Part III (SEL Launch Demonstration). 576 FLTS, and/or the unit commander may also implement this analysis as a vehicle for analyzing significant anomalies occurring during Parts I, II, and IV.

3.2.17.2. The anomaly analysis required by this instruction will in no way infringe upon the requirements of, or relieve responsibility for accident/incident investigation and reporting under Safety Guide SE-001, ***Investigating and Reporting USAF Mishaps.***

3.2.17.3. The unit commander or his/her designated representative is responsible for the investigation of any test objective failure, countdown abort, or significant anomaly. Assistance from the on-site OO-ALC SELECT is mandatory for investigation of Part III failures/anomalies. If required, request OO-ALC SELECT assistance for Part I, II, or IV anomalies.

3.2.17.4. The unit commander or his/her designated representative will chair an AAT conducting investigations. An AAT will consist of the following members or their designated representatives plus any others a unit commander deems appropriate: Unit commander; SEL TSM; 576 FLTS TM; maintenance officer; OO-ALC SELECT team; SWC Program Officer; missile safety officer; Chief, Technical Engineering Flight; Chief, Quality Assurance; Chief, Standardization/Evaluation; Chief, Operations Training; and the AAMT (On-site maintenance officer and technical engineer).

3.2.17.5. The anomaly analysis portion of SEL testing cannot be over emphasized. Integrity of the test site must be maintained and a thorough analysis/investigation made and reported. This is the only way deficiencies can be identified and corrected.

3.2.17.6. Immediately report anomalies occurring during Part II to the unit commander. During the notification process, the SEL TSM will also request permission to form the AAT.

3.2.17.7. If the AAT is formed during Part III, the SEL TSM/TM will ensure TET is standing by (manned LF) or will dispatch a QRM team and AAMT to penetrate LF (unmanned LF). When an LF is penetrated, SEL TSM/TMs will provide the team with preliminary instructions for emergency procedures, maintaining site integrity, and gathering status (Anomaly Analysis Section of TSD).

3.2.17.8. Do not enter test LFs evacuated for safety reasons until approval for safe entry is declared according to provisions of the SEL T.O.s. Only personnel specifically assigned, approved, and trained to conduct failure analysis will be permitted entry into failed LFs.

3.2.17.9. It is absolutely essential that all agencies make every effort to preserve integrity of the test LF or LCC configuration until such a time that disruptions will have minimal bearing on further investigation efforts. For example, if initial visual inspection of the LF and SEL equipment

indicate any anomaly, do not safe the safety control switch (SCS) to change any pre-launch configuration. Also, the SEL equipment will remain in the "on" condition and will not be reset.

3.2.17.10. The AAT will form in the SEL test command post or some other location with access to the SEL countdown net and develop a preliminary investigation plan. This plan will include the following:

3.2.17.10.1. Immediate actions required of the AAMT or TET.

3.2.17.10.2. Guidance to unit commander and SEL TSM as to whether the remaining portions of the test can be safely continued. Make every effort, consistent with actions required for emergencies, personnel safety, weapon system safety rules and nuclear surety, to process the remaining portions of Part III.

3.2.17.10.3. A preliminary plan for maintaining or returning the site to a safe configuration, maintaining site integrity, and an outline of on-site investigation actions and how the investigation will proceed.

3.2.17.10.4. The test unit will maintain control of all test facilities. Should a significant anomaly occur which requires extensive depot analysis, the AAT investigation will proceed up to a point where a formal request for depot assistance is required. In this case, request OO-ALC support.

3.2.17.10.5. The AAT will prepare a SEL Anomaly Analysis Report (**Attachment 16**) detailing results of its investigation. The report will cover all events, analysis results, and recommendations resulting from the investigation. If further investigation by OO-ALC is required, the AAT report will contain a statement that further analysis is being conducted by OO-ALC.

3.2.17.10.6. Fully document all anomalies experienced during any portion of the SEL test in the performance report. SELECT will provide a final report when their investigation is completed.

3.2.17.10.7. The SWC Program Officer and SELECT engineers may impound hardware to formally evaluate anomaly indications or failures, as required. The fact that an anomaly occurred is UNCLASSIFIED, however, classify details of an anomaly or the results of an anomaly according to appropriate classification guides. Ensure details of anomaly are made readily available for safety purposes.

3.3. Logistics Procedures:

3.3.1. This section covers maintenance actions required to prepare and test SEL configured LFs under conditions and configurations approximating an operational launch. Instructions for a specific unit will be published in the TOAs and TPAs.

3.3.2. Space Wings:

3.3.2.1. The unit will appoint a maintenance and an operations project officer to monitor all maintenance/operations actions associated with this test. Project officers will report directly to the SEL TSM on maintenance/operations matters associated with each SEL test.

3.3.2.2. Maintenance personnel at each test unit will accomplish test preparation and refurbishment. In addition to special test procedures, normal AFSPC maintenance procedures and policies

will remain in effect. Any deviation from standard procedures will require specific approval from the SEL TSM, SEL TM, SWC Program Officer and 20 AF/LG.

3.3.2.3. The operational unit will develop a detailed maintenance flow plan for all maintenance test requirements associated with SEL testing.

3.3.2.4. Clear all unaccomplished TCTOs that would affect a SEL test prior to initiation of testing. Do not perform maintenance solely to ensure a successful test. After completion of Part I, (and subsequent start-up in SELM/SELP configuration), each LF will be secured and treated as if it were an EWO facility. Normal weapon system maintenance will be performed. However, all maintenance must be accomplished by appropriately trained SELM/SELP qualified maintenance teams. Subsequent dispatch to a SELM/SELP LF requires notification to the unit TSM and SEL TM. Deviating from this procedure could invalidate test results for that LF. Clear any discrepancies/deficiencies found after the test during SIOP reposture.

3.3.2.5. All maintenance personnel involved in SEL testing must satisfy the training required/ qualifications.

3.3.2.6. All maintenance teams identified to perform maintenance in the test squadron will receive special SEL training. MMOC will be provided a roster of personnel/teams identified, briefed, and qualified to perform maintenance in the test flight. Plans and Scheduling, maintenance shop schedulers/supervisors and/or MMOC (as applicable) must assure those maintenance teams dispatching to SEL test LFs are SEL trained.

3.3.2.7. Issue test unique Job Control numbers for all tasks associated with this test. Work orders will be over-stamped SELM or SELP, and have the term "SELM or SELP" conspicuously entered in the event narrative. If directed, retain SEL work orders until the SEL performance report is complete.

3.3.2.8. Have maintenance teams available to respond to an emergency within the test unit on test days. This includes on-site TETs at LFs where ordnance is being expended and four QRM teams (one per each non-test flight MAF). [WS133B]: Dispatch an additional QRM team within each non-test squadron on both ground and airborne test days. [WS-133AM/118A]: Dispatch an additional QRM team within each non-test squadron on airborne test day.

3.3.2.9. Use SEL T.O.s for isolation interconnectivity between LFs and LCCs and safety procedures.

3.3.2.10. Use appropriate test designated codes and code components for all test LCCs and LFs. Control and handle these components IAW SD 501-12, ***Control of ICBM Code Components***, and AFSPCI 91-10501, ***ICBM Launch Control and Code Systems.***

3.3.2.11. Review all new TCTOs received prior to test activities to ascertain if completion is required prior to the test.

3.3.2.12. Configure SEL test LFs IAW applicable SEL T.O. requirements, TEO, and this instruction.

3.3.2.13. Accomplish refurbishment as soon as possible after completion of the test. AFSPC maintenance teams will accomplish LF refurbishment. Support personnel may be provided by OO-ALC if requested by the unit and approved by 20 AF/LG.

3.3.3. Quality Assurance:

3.3.3.1. Unit QA must actively participate in maintenance training and SEL configuration to include the following:

3.3.3.1.1. Providing sufficient personnel to support the SEL test.

3.3.3.1.2. Reviewing SEL maintenance lesson plans and monitoring initial training sessions.

3.3.3.1.3. Reviewing SEL technical orders and developing local checklists IAW T.O. 00-5-1.

3.3.3.1.4. Verifying SEL configuration procedures in the training LF prior to test facility deposture.

3.3.3.1.5. Observing SEL configuration activities at test LFs/LCCs and verifying configuration prior to SEL start-up.

3.3.3.1.6. Participating in "Last Look" inspections.

3.3.4. Equipment Processing:

3.3.4.1. [SELM]: The Mobile Test Unit (MTU) contains SELM equipment required for test conduct and is the vehicle used to transport SELM equipment between its various destinations. The MTUs minimize individual container handling and provide an easy means to inventory and store SELM equipment when not in use. At a test unit, the MTU will be transferred to AFSPC for duration of test activities. All equipment not in use will either remain locked in the MTU or in a secure storage area designated by the SELM TM.

3.3.4.2. The Mobile Instrumentation FacilityMIF contains equipment required to monitor and evaluate ALCS critical and non-critical commands. OO-ALC will transport the MIFs to test wings and operate them as directed by the TOA, TPA and TSD.

3.3.5. SEL Equipment Handling and Processing:

3.3.5.1. Use DD Form 1149, **Requisition and Invoice/Shipping Document**, and supporting documentation for transfer of equipment from one agency to another; (e.g., AFSPC to OO-ALC to AFSPC, etc.). Mark Block 4 of DD Form 1149 (ACCOUNTABLE TO ALC ACCOUNT 525SE - DO NOT POST).

3.3.5.2. [SELM]: Ship MTUs in a locked/sealed container to the maintenance squadron equipment section at each test unit, marked for Giant Pace. A set of keys will accompany the shipping document (DD Fm 1149, Requisition and Invoice/Shipping Document). SEL TSM's representative will receive the MTU in a locked/sealed condition.

3.3.5.3. [SELM]: The OO-ALC representative, along with wing representatives, will jointly inventory contents of the loaded MTU to item levels. When satisfied inventories are correct, both the OO-ALC representative and SEL TSM's representative will sign a copy of the shipping document (DD Fm 1149, **Requisition and Invoice/Shipping Document).** These signatures certify the contents of each MTU shipment.

3.3.5.4. The OO-ALC representative is authorized joint usage of test wing PMEL and E-lab facilities for repair/calibration/certification as required; however, the OO-ALC representative will not impact mission essential work.

3.3.5.5. Use standard work orders to accomplish installation/removal of SEL equipment issued by Plans and Scheduling. Conspicuously stamp these work orders on the face "SELM" or "SELP."

3.3.5.6. Upon conclusion of test activities, remove SEL equipment from the facilities, place in their proper containers, and return to SEL TSM's representative. Place equipment in the [SELM]: MTU or other secure storage area.

3.3.5.7. The OO-ALC representative and SEL TSM's representative will jointly inventory all equipment when it is returned to the support base after test week. [SELM]: With a correct inventory the SEL TSM's representative will turn over MTU keys to the OO-ALC representative. Both representatives will sign and date the DD Form 1149, **Requisition and Invoice/Shipping Document**.

3.3.5.8. [SELM]: The OO-ALC representative will prepare a new DD Form 1149, **Requisition and Invoice/Shipping Document**, for shipping the MTU to its next destination.The maintenance squadron equipment section, upon notification, will comply with shipping instructions from OO-ALC.

3.3.5.9. The test unit is responsible for lost/damaged equipment while under AFSPC control. Use existing directives to seek relief from responsibility for property lost or damaged while under AFSPC control.

3.3.5.10. The OO-ALC representative will ensure that action is taken to repair or replace, calibrate and certify the SEL equipment prior to subsequent use.

3.3.5.11. [SELM]: The local base transportation officer will ship loaded MTUs after instructions for shipping are received from the OO-ALC representative.

3.3.6. Comptroller:

3.3.6.1. Non-AFSPC organizations will determine means of internal budgeting/funding required to support this program. Expenditure of funds by OO-ALC in support of SEL will be IAW provisions of applicable Minuteman and Peacekeeper program management directives.

3.3.6.2. HQ AFSPC/DOTO will submit funding requirements to Program Element Monitor (PEM) in support of the SEL program. ESP code 7V will be used for all operation and maintenance (O&M) funds obligated in support of the SEL program. The unit will fund all depot level reparable (DLR) cost incurred from SEL test from their unit DLR account. The SEL TSM will submit a SEL Expense Report to HQ AFSPC/DOTO listing all test expenses incurred by Element of Expense Investment Code (EEIC) within 90 days from completion of test. Upon receipt of the SEL Expense Report, HQ AFSPC/DOTO will coordinate with HQ AFSPC/FM to reimburse each unit for costs incurred.

3.4. Reporting:

3.4.1. Reporting is essential for effective SEL program management as well as for accurate evaluation of weapon system performance. Transmit all unclassified messages for Giant Pace missions Encrypt for Transmission Only (EFTO). Reporting requirements encompass two primary areas: the status of program events and detailed information following completion of each event. The 576 FLTS is responsible for ensuring SEL reports are accurately and timely completed.

3.4.2. Glory Trip Task Force/Giant Pace Key Personnel Message (**Attachment 3**). For each SEL test the operational unit will send a Glory Trip Task Force/Giant Pace Key Personnel Message identifying key personnel not later than five days after receipt of the implementing TEO. Key personnel are as a

minimum, the test support manager, operations officer, maintenance officer, and the maintenance NCOIC.

3.4.3. SEL Status Report (Attachment 12):

3.4.3.1. This report is used to report the results and completion of Part I Alert Readiness Tests, Part II SEL Posture, and Part IV SIOP Reposture. The SEL TSM will transmit this report within 24 hours of completion of Part I, II, and IV.

3.4.3.2. Part I results in this report will contain the ART results for each test sortie by test type (i.e., Enable Test, Missile Test, SCNT Test). The SEL TSM and TM will score test results using the following criteria:

3.4.3.2.1. SUCCESSFUL (S). LF successfully completed designated weapon system test with no anomalies noted.

3.4.3.2.2. SUCCESSFUL WITH ANOMALY (SA). LF successfully completed designated weapon system test with any anomaly noted which will not prevent launch.

3.4.3.2.3. FAILURE (F). LF failed designated weapon system test with anomaly that would prevent launch.

3.4.3.2.4. NO TEST (NT). LF was not tested due to it being off alert at time of test or T.O. restrictions prevented specific test.

3.4.3.2.5. The Part II and IV results in this report should report the Zulu date time group each facility was put into final SEL configuration or SIOP repostured. [SELP]: Part IV reports will also include results for the USDA connectivity test.

3.4.3.2.6. The report will be UNCLASSIFIED and must not contain any data on causes of failures or failed components. Provide a description of abnormal indications, hardware/software anomalies or test failures in a SECRET follow-up SEL Problem Report.

3.4.4. SEL Problem Report (Attachment 14):

3.4.4.1. This multipurpose report is used for resolving significant problems or reporting preliminary causes of Parts I and III anomalies and failures. The SEL TSM will use this to report preliminary causes of failures. Classify it IAW the ICBM Security Classification Guide.

3.4.4.2. The report will identify test, test unit, problem site, a description of problem, T.O. in use when problem was identified, when problem occurred or was discovered, probable cause, remarks, and POC.

3.4.5. SEL Terminal Countdown Report (Attachment 15):

3.4.5.1. This report is used to report results of the Part III Launch Demonstration on ground and airborne test day. The SEL TSM will coordinate with the TM and transmit this report within twelve hours following ground and airborne test

3.4.5.2. The report will identify commit time, method of commit, LF committed, TCD time, and results by increment and POC. The SEL TSM and TM will score test results using the following criteria:

3.4.5.2.1. SUCCESSFUL (S). Sortie successfully completed all critical commands and TCD with no anomalies noted.

3.4.5.2.2. SUCCESSFUL WITH ANOMALY (SA). LCC and LF successfully completed all critical commands and TCD with any anomaly noted that would not prevent launch or sortie successfully completed all critical commands and TCD with any anomaly noted during non-LR portion of test.

3.4.5.2.3. FAILURE (F). LCC failed to correctly process and send critical commands to test LF with anomaly that would prevent launch. LF failed to correctly process a critical command or TCD with anomaly that would prevent launch. (Exception: UHF Radio Drawer failures will be scored as SAs.)

3.4.5.2.4. NO TEST (NT). Sortie was not tested or test failure was caused by test equipment.

3.4.5.3. Like the SEL Status Report, this report is UNCLASSIFIED and only indicates results for each test LCC and LF. Do not identify any causes of failure or failed components. If required, follow-up with classified SEL Problem Report and/or SEL Anomaly Analysis Report.

3.4.6. SEL Anomaly Analysis Report (Attachment 16):

3.4.6.1. The SEL TSM, 576 FLTS, and OO-ALC SELECT will submit this report to detail results of an AAT investigation. The report is mandatory for any countdown abort or any anomaly occurring during Part III. It is also required anytime the AAT is formed to investigate any Part I, II, or IV anomaly. Classify this report IAW the ICBM Security Classification Guide.

3.4.6.2. The report will identify test, unit, anomaly site, classification of anomaly, date/time of anomaly, test increment anomaly occurred, anomaly description, test synopsis, anomaly analysis, action taken, impact of indications, recommendations, conclusions, and POC.

3.4.7. SEL Performance Report:

3.4.7.1. This report is used to detail test results, configuration, and conduct. Classify the report IAW appropriate Security Classification Guide. The TM will submit this report within 60 calendar days of last test day or receipt of last test data.

3.4.7.2. The report will include an Executive Summary and cover test objectives, significant test issues, configuration, data, performance data, and a recommendation for LCC/LF scoring. Include as attachments the Last Line Isolation Log, Giant Pace Test Log, TCD Data Records, and the ALCS Operational Test Summary.

3.4.8. SEL Expense Report. This report is used to detail unit expenses incurred by conducting a SEL test and forms the basis for unit reimbursement of these expenses by HQ AFSPC/DOTO. The report will list all test expenses incurred by EEICs. The SEL TSM will submit a SEL Expense Report to HQ AFSPC/DOTO within 90 days from completion of test.

Chapter 4

OLYMPIC PLAY TESTING

4.1. General. The Olympic Play program is an integral part of the ICBM FDE program. Olympic Plays provide valuable launch reliability data used to develop SIOP planning factors and in Ogden ALC's Weapon System Aging Surveillance Program. Olympic Plays allow AFSPC to test ICBM weapon systems in their deployed environment without breaking operational configuration to install test equipment or instrumentation.

4.1.1. Headquarters AFSPC:

4.1.1.1. Be responsible for overall management of the Olympic Play program. (HQ AFSPC/DOTO)

4.1.1.2. Provide MAJCOM policy and guidance for the Olympic Play program.

4.1.1.3. Initiate HQ AFSPC/IG directed Olympic Play tests during Operational Readiness Inspections and Nuclear Surety Technical Inspections.

4.1.1.4. Analyze test results for use as appropriate to develop the estimate of weapon system reliability for SIOP planning.

4.1.1.5. Review and analyze test results to identify specific missile and launch support equipment failures, identify corrective actions, and detect trends which could impact future weapon system reliability rates.

4.1.2. HQ SWC:

4.1.2.1. Assign program officer as the primary point of contact for SWC and higher headquarters coordination and review of the Olympic Play program.

4.1.2.2. Assign a Responsible Test Agency to accomplish oversight and reporting for Olympic Play testing.

4.1.2.3. Ensure test agency assigns a point of contact who will inform SWC project officers of Olympic Play updates.

4.1.3. 20 AF:

4.1.3.1. Assist the missile units with Olympic Play reporting and review the reports for accuracy, completeness, and timeliness.

4.1.3.2. Appoint an Olympic Play Monitor and Alternate as single point of contact for Olympic Play matters. Notify HQ AFSPC/DOTO/LGML, HQ SWC/XRT, 576 FLTS/TEE and subordinate missile units of these appointments. Include in notification, name, grade, office symbol, and duty phone number.

4.1.4. The 576 FLTS:

4.1.4.1. Act as RTA for the Olympic Play program.

4.1.4.2. Manage day-to-day conduct of Olympic Play program.

4.1.4.3. Coordinate and implement Olympic Play policy and procedures.

4.1.4.4. Oversee the conduct and reporting of Olympic Play tests.

4.1.4.5. Collect and review missile unit Olympic Play Test Results Reports and Sortie Effectiveness Reports for accuracy, completeness, and timeliness.

4.1.4.6. Publish Olympic Play Quarterly Reports as directed by this instruction.

4.1.4.7. Appoint an Olympic Play Monitor and Alternate as single point of contact for Olympic Play matters. Notify HQ AFSPC/DOTO/LGML, HQ SWC, 20 AF and missile units of these appointments. Include in notification, name, grade, office symbol, and duty phone number.

4.1.5. Space Wings:

4.1.5.1. Schedule Olympic Play tests in conjunction with -6 T.O. requirements. As a minimum, an Olympic Play test will be scheduled and conducted once a month for each missile squadron. The unit publishes test schedules in weekly operations and maintenance schedule/plan. Tests conducted as a result of HQ AFSPC, HQ SWC, 20 AF, 576 FLTS, or unit commander directed no-notice Olympic Play tests can be used as the normal scheduled monthly Olympic Play test.

4.1.5.2. Conduct Olympic Play tests according to Weapon System Safety Rules, current AFSPC safety directives, appropriate T.O.s and this instruction.

4.1.5.3. Train missile crew members on Olympic Play procedures.

4.1.5.4. Develop procedures to ensure Olympic Play tests are conducted in a minimum of time consistent with safety and existing operating priorities.

4.1.5.5. Identify warfighting PLCA missile crews will command during Olympic Play tests. PLCAs will be run IAW GATI para 3.7f.

4.1.5.6. Conduct an anomaly analysis of each Olympic Play anomaly. Technical engineering will submit a Sortie Effectiveness Report to 576 FLTS/TEE with copies to HQ AFSPC/DOTO/LGML, HQ SWC/XRT and 20 AF/LGO detailing anomaly analysis results within five workdays of a LF being returned to SIOP alert or resolution of anomaly.

4.1.5.7. Report results of Olympic Play tests as directed by this policy and guidance. Report results of all scheduled and no-notice (i.e., HQ AFSPC/IG, 20 AF/CCA) Olympic Play tests to 576 FLTS/TEE.

4.1.5.8. Appoint an Olympic Play Monitor and Alternate as single point of contact for Olympic Play matters. Notify HQ AFSPC/DOTO/LGML, 20 AF, HQ SWC/XRT, and 576 FLTS/TEE of these appointments. Include in notification, name, grade, office symbol, and duty phone numbers. Olympic Play monitors must be knowledgeable of test requirements and reporting procedures, and have access to this policy and guidance. The Olympic Play monitor is responsible for the following:

4.1.5.8.1. Schedule and conduct Olympic Play tests as required by this instruction.

4.1.5.8.2. Coordinate with unit technical engineering to determine appropriate LF scoring following any Olympic Play anomaly. LFs will be scored according to rules in Olympic Play Reporting Section of this instruction.

4.1.5.8.3. Submit Olympic Play Results Report within three workdays of test completion.

4.1.5.8.4. Ensure unit technical engineering accomplishes Olympic Play Sortie Effectiveness Reports within five workdays from resolution of the anomaly for all anomalies occurring during Olympic Play tests.

4.1.5.8.5. Maintain file copies of all Olympic Play test results until receipt of the Olympic Play Quarterly Report for that period.

4.2. Olympic Play Procedures:

4.2.1. Units must conduct Olympic Play tests once a month for each missile squadron. The tests may be scheduled or no-notice.

4.2.2. If a no-notice Olympic Play is conducted prior to the scheduled Olympic Play, the unit has the option of conducting the scheduled Olympic Play. [Note: At least one test must be accomplished each month to each missile squadron.]

4.2.3. HQ AFSPC/IG, 20 AF or unit commander may initiate no-notice Olympic Play tests.

4.3. Test Conduct:

4.3.1. An Olympic Play Test Initiation Message will initiate Olympic Play tests.

4.3.2. Olympic Play Test Initiation Messages will be transmitted clear text by any means available. Test Initiation Messages may be addressed to wings, groups, squadrons, flights, individual missiles, or a combination thereof. The message will contain appropriate addressing, test identifier (Olympic Play), a reference time and authentication.

4.3.3. The Olympic Play Test Initiation Message authorizes missile combat crews to conduct an Olympic Play test.

4.3.4. Only mission ready missile combat crew members may perform weapon system tests during an Olympic Play test.

4.3.5. The unit conducts an Olympic Play test by performing weapon system tests, interrogations, and commands listed in **Attachment 17**. Unless required by T.O. or safety constraints, the sequence of testing may be determined locally. However, target verification interrogations must be initiated before commanding PLC-A.

4.3.6. Initiate all required weapon system tests, interrogations, and commands to each LF on alert at test initiation. Conduct the Olympic Play test with minimum delay consistent with existing operating priorities.

4.3.7. PLCAs will be run IAW GATI para 3.7f.

4.3.8. Do not remove LFs from alert after test initiation, unless the LF is exempted by paragraph **4.4.**, until after test is complete.

4.3.9. Conduct all Olympic Play activities according to existing nuclear weapon system safety rules, current AFSPC safety directives, appropriate T.O.s, and this instruction.

4.4. Test Exemptions:

4.4.1. The following LFs are exempt for Olympic Play tests: LFs with missile, ground support equipment, or real property installed equipment undergoing major modifications, engineering change proposals, and time compliance T.O. changes or master change log modifications affecting alert status.

4.4.2. LFs identified for operational flight tests (Glory Trips), simulated electronic launch tests (Giant Paces), or special ground tests.

4.4.3. LFs being reported as "F" or "L" category codes in the Missile Sortie Status Report at test initiation.

4.4.4. LFs scheduled for retargeting if Olympic Play testing will delay completion of retargeting actions until after effective time listed in the Joint Planning Interim Change (JPIC) for each LF.

4.4.5. LFs returned to alert after reference time specified in the Test Initiation Message.

4.5. Reporting:

4.5.1. Olympic Play Results Report (**Attachment 18**).

4.5.2. The missile unit Olympic Play monitor submits this report to 576 FLTS/TEE with copies to HQ AFSPC/DOTO/LGML, HQ SWC/XRT and 20 AF/LGO within three workdays of test completion.

4.5.3. The report summarizes results of a single squadron's Olympic Play test. The report will identify squadron tested; date time group test was started; number of LFs tested; the number of LFs scored successful, successful with anomalies, total successful, failures, and no-tests; identification and explanation of why LFs were scored successful with anomalies, failures, and no-tests; and POC for the report.

4.5.4. Consult technical engineering for technical opinion on LF effectiveness whenever an anomaly occurs during an Olympic Play test. Score each LF using the following criteria:

4.5.4.1. SUCCESSFUL (S). LF successfully completed Olympic Play with no anomalies noted.

4.5.4.2. SUCCESSFUL WITH ANOMALY (SA). LF successfully completed Olympic Play with an anomaly noted which would not prevent launch.

4.5.4.3. FAILURE (F). LF failed Olympic Play with an anomaly which would prevent launch. (e.g., MCC actions caused LF to fail a portion of the test preventing the launch of a launch capable LF; LFs with incorrect target verification response, computer memory verification check for any target or current execution plan case.)

4.5.4.4. NO TEST (NT). LF was not tested.

4.5.5. Olympic Play Sortie Effectiveness Report (Attachment 19):

4.5.5.1. Missile unit technical engineering will submit this report to 576 FLTS/TEE with copies to HQ AFSPC/DOTO/LGML, HQ SWC/XRT and 20 AF/LGO within five workdays of the LF being returned to SIOP alert or resolution of anomaly.

4.5.5.2. The report details results of anomaly analysis conducted for each Olympic Play anomaly. Reports should detail fault description, corrective action, LF history, recommended scoring, and POC. Technical engineering will use the scoring criteria in paragraph **4.5.4.**

4.5.6. Olympic Play Quarterly Report (Attachment 20):

4.5.6.1. 576 FLTS/TEE will submit this report to HQ AFSPC/HO/LGM/DOTO/DOMN, USSTRATCOM/J-312/J-441, HQ SWC/XRT, 20 AF/DO/LG, OO-ALC/LME, and missile units within 15 workdays after completion of a fiscal year quarter.

4.5.6.2. This report compiles results of all Olympic Play tests for a given quarter. Reports will detail by missile unit and weapon system the number of LFs tested; number of LFs scored successful, successful with anomaly, total successful (total LFs scored "S" and "SA"), failures; and the ratio of total successful LFs over total LFs tested. Also, the report will detail each failure or anomaly by missile unit to include LF identifier, Zulu date time group test began, fault/anomaly description, and corrective action taken.

ROBERT C. HINSON, Maj Gen, USAF
Director of Operations

Attachment 1

GLOSSARY OF ACRONYMS AND DEFINITIONS

Acronyms

AAMT—anomaly analysis management team

AAT—anomaly analysis team

ACC—Air Combat Command

AFSPC—Air Force Space Command

AFTO—Air Force Technical Order

AGE—Aerospace Ground Equipment

ALCC—airborne launch control center

ALCS—airborne launch control system

ART—alert readiness test

ASR—auxiliary status response

AVE—aerospace vehicle equipment

CEP—circular error probable

CFR—code of federal regulations

COI—critical operational issue

DIFM—due in for maintenance

DLR—depot level repairable

DTG—date time group

EAID—equipping, quthorized and in use detail

EAP—emergency action procedures

ECP—engineering change proposal

EED—electronic explosive device

EEIC—element of expense investment code

EFTO—encrypt for transmission only

EMDAS—Expanded Maintenance Data Acquisition System

EOQ—end of quarter

ERRC—expendable, repairable, recoverable cost designator

ERT—emergency response team

ESSG—environmental sensing signal generator

ETA—estimated time of arrival

EWO—emergency war order

FDE— force development evaluation

FLTS— Flight Test Squadron

FMT—facility maintenance team

FOT&E—follow-on operational test and evaluation

GATI—Generation and Targeting-ICBM

GBL—Government Bill of Lading

GMR—ground maintenance response

GST—ground system test

HAC/RMPE—Higher Authority Communications/Rapid Message Processing Element

IAW—in accordance with

ICBM—intercontinental ballistic missile

IMMP—improved maintenance management program

IMU—inertial measurement unit

ITA—IFSS truss assembly

JPIC—joint plans interim change

JTA—joint test assembly

LAG—launch analysis group

LCC—launch control center

LCP—launch control panel

LD—launch director

LEGG—launch eject gas generator

LF—launch facility

LR—launch reliability

LRR—Launch Readiness Review

LSA—lateral support assembly

LSS—Logistics Support Squadron

MAF—missile alert facility

MAJCOM—Major Command

MCC—missile combat crew

MCCC—missile combat crew commander

ME—maintenance expediter

MF—medium frequency

MGCS—missile guidance and control system

MGS—missile guidance set

MIF—mobile instrumentation facility

MMOC—missile maintenance operations center

MPHT—missile potential hazard team

MPO—Missile Program Officer

MSR—maintenance status response

MTMC—Military Traffic Management Command

MTU—mobile test unit

MXS—Maintenance Squadron

NAF—Numbered Air Force

NCO—non-commissioned officer

NCU—nozzle control unit

NOCM—Nuclear Ordnance Commodity Management

OO-ALC—Ogden-Air Logistics Center

O&M—operations & maintenance

ORD—Operational Requirements Document

OTL—operational test launch

PBCS—post boost control system

PCD—project code designator

PLCA—preparatory launch command-A

PMEL—Precision Measurement Electronics Lab

PRD—Program Requirements Document

PSRE—propulsion system rocket engine

QA—quality assurance

QRM—quick reaction maintenance

RCS—report control symbol

REACT—Rapid Execution and Combat Targeting

RESHIP—report of shipment

RS—reentry system

RSTS—reentry system test set

RTA—Responsible Test Agency

RV—reentry vehicle

RVCS—reentry vehicle configuration

SCARS—Serialized Control Asset Reporting System

SCD—secure code device

SCNT—sensitive command network test

SCS—safety control switch

SE—safety office

SEL—simulated electronic launch

SELECT—System Engineering Level Evaluation and Correction Team

SELM—simulated electronic launch-Minuteman

SELP—simulated electronic launch-Peacekeeper

SIOP—single integrated operational plan

START—Strategic Arms Reduction Treaty

SW—Space Wing

TC—Test Conductor

TC-A—Test Conductor-Airborne

TCD—terminal countdown

TCTO—time compliance technical orders

TDY—temporary duty

TET—test evaluation team

TEO—test execution order

TFC—task force commander

TM—test manager

TMO—traffic management office

TO—test order

TOA—test order annex

TP—test plan

TPA—test plan annex

TPD—test planning document

TRRB—Test Readiness Review Board

TSD—test sequence document

TSM—Test Support Manager

UCT—USDA connectivity test

UDS—Universal Documentation System

UHF—ultra high frequency

USCINCSTRAT—United States Commander in Chief Strategic Command

Definitions

Alert Readiness—Period after which the weapon system, except for Vandenberg AFB-unique items such as range safety systems, have been checked and determined ready for launch. Alert readiness begins at the completion of startup testing (Missile Test and Enable Test) and required Remote Data Change.

EWO Configured Missile— An alert missile and war reserve reentry system at an operational launch facility.

ICBM Test Director— The Chief, Operations Testing and Evaluation, HQ AFSPC/DOTO, has ultimate responsibility for all AFSPC ICBM operational testing.

Launch Director— The 576 FLTS Top Hand staff officer, who directs range user, instrumentation checkout, countdowns and integrates receipt-through-launch operations and maintenance tasks. Serves as the single point for coordination between the 576 FLTS test managers, task force commander, and all Vandenberg AFB agencies.

OTL Configured Missile— An operational missile with an OTL RS and the required range instrumentation and safety equipment.

OTL Reentry Vehicle/Reentry System (RV/RS)— RV/RS components assembled with non-nuclear devices as designated in the TOA. The RS includes the shroud, deployment module, and non-nuclear MK-21, MK-12, MK-12A reentry vehicles.

OTL Identifier —— HQ AFSPC will use the unclassified nickname "GLORY TRIP" combined with the TOA number and weapon system identifier (for example "Glory Trip xxxx") to identify a specified OTL mission. OTL Weapon System Identifiers: Minuteman III GB (WS-133B/LGM30G); Minuteman III GM (WS-133A-M/LGM30G); Peacekeeper PA (WS-118A-LGM).

Program Officer — The missile operations staff officer assigned to the DOTO, who exercises overall management and control of the ICBM FDE program. There's a program officer for OTL and another for SEL.

Test Conductor-Airborne— A technical advisor provided by OL-B, HQ AFSPC/CCTS, aboard the test aircraft, to coordinate ALCS activities during ALCC isolation verification and launch countdowns.

Test Execution Order (TEO)— Test specific tasking notification drafted by HQ SWC. Each TEO contains mission specific requirements and responsibilities each participating must accomplish to ensure mission success.

Task Force Commander— The senior representative (Lieutenant Colonel) from the missile unit. He/She supervises the FDE exercise at the operational unit and commands the task force assigned to conduct the exercise at Vandenberg AFB

OTL Test Manager (TM)—The 576 FLTS Top Hand staff officer, who manages and controls test

activities at Vandenberg AFB and serves as the single point for coordination between HQ AFSPC, 20 AF, and 30 RANS. During launch countdown, controls the overall test and ensures adequate sensor coverage to meet test objectives. The TM submits the final performance report.

SEL Test Manager—– The 576 FLTS Top Hand staff officer who advises and assists the SEL Test Support Manager for the following: preparation of the TSD; approval of all unit SEL lesson plans; directing SEL isolation verification and countdown activities. The TM submits the final performance report.

Test Order (TO)— A formal tasking document that outlines the background and purpose of the test, its objective and scope, responsibilities, physical, material, financial, personnel, priority and reporting requirements. Supplementing information may be documented in a test order annex.

Test Plan (TP)— A formal document produced by the RTA providing the complete detailed, coordinated, and integrated plan for conducting a test to obtain answers to COIs. Supplementing information may be documented in a test plan annex.

Test Support Manager (TSM)— A Lieutenant Colonel designated by the unit commander to manage the unit SEL activities.

Test Unique Tasks— Those tasks which are not required at the operational unit or which are performed in a significantly different sequence and are unique to the operational test environment.

Attachment 2

SAMPLE OTL TASK FORCE SCHEDULE

Table A2.1. Schedule.

WEEKDAY/DAY	ACTIVITY
Sunday/1	Task Force Key Personnel Arrival
Monday/2	Task Force Key Personnel Briefings/Interviews
	Task Force Main Body Arrival
Tuesday/3	Task Force Familiarization Briefings
Wednesday/4	Task Force Counterpart Briefings
Thursday/5	[**Peacekeeper**] Route Survey
Friday/6	[**Peacekeeper**] Emplace LEGG & LSA; LCC Startup
	[**Minuteman**] Route Survey
Monday/9	[**Peacekeeper**] Emplace Stage I
	[**Minuteman**] LCC Startup; Emplace Booster
Tuesday/10	[**Peacekeeper**] Emplace Stage II
	[**Minuteman**] Emplace Post Boost Control System
Wednesday/11	[**Peacekeeper**] Emplace Stage III
	[**Minuteman**] Emplace RS; Tapeload & Startup
Thursday/12	[**Peacekeeper**] Emplace Stage IV
Friday/13	[**Minuteman**] Alert Ready
Monday/16	[**Peacekeeper**] Emplace RS
Wednesday/18	[**Peacekeeper**] Install MGCS
	[**Minuteman**] ALCS Test
Monday/23	[**Peacekeeper**] Tapeload & Startup
Wednesday/25	[**Minuteman**] Launch
Friday/27	[**Peacekeeper**] Alert Ready
Wednesday/32	[**Peacekeeper**] ALCS Test

Wednesday/39	[**Peacekeeper**] Launch

NOTE:

Launch will normally be conducted when the missile has achieved a minimum of ten days uninterrupted Vandenberg AFB Operational Test Alert Time. ***CAUTION: Activities will vary based on mission requirements.***

Attachment 3

SAMPLE GLORY TRIP TASK FORCE/GIANT PACE KEY PERSONNEL MESSAGE

FROM:(UNIT)

TO:HQ AFSPC PETERSON AFB CO//DOTO/LGML//

HQ SWC SHRIEVER AFB CO//CC/XRT//

20AF F E WARREN AFB WY//DO/LG//

576FLTS VANDENBERG AFB CA//CC/TE/TEM/TM/TMO//

INFO:OO ALC HILL AFB UT//LME/LMEI//

UNCLAS

SUBJ: GLORY TRIP TASK FORCE (NUMBER)/GIANT PACE (NUMBER) KEY PERSONNEL

1. TASK FORCE COMMANDER/TEST MANAGER: (Rank, Name, Org/Office Symbol, Duty/Home Phone).
2. OPERATIONS OFFICER: (Rank, Name, Org/Office Symbol, Duty/Home Phone).
3. MAINTENANCE OFFICER: (Rank, Name, Org/Office Symbol, Duty/Home Phone).
4. MAINTENANCE NCOIC: (Rank, Name, Org/Office Symbol, Duty/Home Phone).
5. POC: (Rank, Name, Phone Number).

Attachment 4

TASK FORCE AUTHORIZATION/NOTIFICATION ROSTER INSTRUCTIONS

List all task force personnel to include their grade (as of arrival date), name, social security number, and position. Each individual must sign the roster. If a change to the original roster is required, simply submit another roster with only the new or changed individual(s) listed. A complete roster isn't required. Also, attach a letter describing the change. Except where specifically indicated, mark an X in each column that applies to a member of the task force. Completed rosters should be returned to the LD 10 work days prior to TF arrival at Vandenberg AFB.

Column A - "Security Clearance:" Mark an S for Secret or TS for Top Secret Clearance.

Column B -"Two-Person Policy:" Indicate those task force personnel who are current in Two-Person Policy training.

Column C -"LCC Access:" List all MCCMs and any other personnel in the task force desired. An "E" designates an individual authorized to escort below ground. (Recommend you list all officers with operations experience.)

Column D -"Code Officer/Handler:" Indicate assigned code control group for code handlers.

Column E -"Code Training:" If recurring codes training is required at VAFB, indicate the month by number (e.g., Jan = 1)

Column F -"Receipt/MGS/MGCS:" List personnel authorized to receipt for the classified guidance set.

Column G -"Access Munitions:" Indicate personnel requiring access to the 576 FLTS Munitions area. Include MMT Chief. Recommend TFC, maintenance OIC and NCOIC are designated "E."

Column H -"RS and Ground Ordnance:" Indicate personnel authorized to receipt for the RS and Ground Ordnance. Recommend you indicate MMT Chief.

Column I -"MPHT Member:" Include all officers.

Column J -"Vehicle Operator:" List all personnel who have a valid driver's license.

Column K, L, M - "Safety, Information, and Vehicle Control Officers:" Indicate officers assigned to these positions.

Column N -"EWO Training:" If recurring EWO training is required at VAFB, indicate the month by number (e.g., Jan = 1)

Column O"COMSEC Training:" Indicate those task force personnel who are current in COMSEC training.

"Last Entry" must be typed on the next line following the last member's name. The TFC must sign and date the certification statement on the roster. The 576 FLTS Security Manager will information on the roaster.

Attachment 5

SAMPLE OTL STATUS REPORT

FROM:(UNIT)

TO:HQ AFSPC PETERSON AFB CO//DOTO/LGML/LGMW//

HQ SWC SHRIEVER AFB CO//XRT//

20AF F E WARREN AFB WY//DO/LG//

576 FLTS VANDENBERG AFB CA//CC/TE/TEM/TM/TMO//

OO ALC HILL AFB UT//LME//

20 AF 625 MOF OFFUTT AFB NE//TAB//

UNCLAS

SUBJ: GLORY TRIP (NUMBER) STATUS REPORT FORMAT

1. THIS MESSAGE CONSISTS OF THREE PARTS CORRESPONDING TO PARTS I, II, AND III OF THE OTL PROCESS. UPDATES AFTER EACH PART ARE AS FOLLOWS:

2. PART I. (Alert Readiness Test results and completion time)

3. PART II. (Missile Removal & Transfer results and completion time)

(Include the following for Part II: Stages I, II, III, and [Peacekeeper]: IV

[Minuteman]: PSRE serial numbers.

[Peacekeeper]: LEGG serial number.

Primary and alternate guidance set serial numbers.

[Minuteman]: Primary and alternate MGS battery serial numbers.

[Minuteman]: Gyro data.

Mk 12/12A/21 RS serial numbers.

Components serial numbers by position.

Deployment module part number.

Shroud part number.

Tractor motor part number.

Deployment module electronics part number).

4. PART III. (Missile Emplacement to Alert Readiness results and completion time.).

5. REMARKS. (Schedule deviations, explanation, and impact on remaining schedule.).

6. POC: (Rank, Name, Phone Number).

Attachment 6

SAMPLE OTL RS COMPONENTS AND ORDNANCE MOVEMENT REPORT

FROM:(Reporting Unit)

TO:HQ AFSPC PETERSON AFB CO//DOTO/LGML/LGMW

HQ SWC SHRIEVER AFB CO//XRT/XRTM//

INFO:HQ USSTRATCOM OFFUTT AFB NE//J312/J441//

20AF F E WARREN AFB WY//CC/DO/LG//

14AF VANDENBERG AFB CA//CC/DO//

30SW VANDENBERG AFB CA//CC/OG/LG//

576 FLTS VANDENBERG AFB CA//CC/TE/TM/TEO/TEM/TMO/TMW//

OO-ALC HILL AFB UT//LMEW-SELECT/LME/LMEI-SELECT//

UNCLAS

SUBJ: GLORY TRIP (Number) RS COMPONENTS AND ORDNANCE MOVEMENT REPORT

1. THE FOLLOWING GLORY TRIP (Number) RS COMPONENTS AND ORDNANCE WERE

SHIPPED TO VANDENBERG AFB CA .

A. ORDNANCE. THE FOLLOWING ORDNANCE WERE SHIPPED ON (Date), BY (Mode of shipment). ETA TO VANDENBERG AFB IS (Date). SHIPPING DOCUMENT NUMBER(S) (Number).

(1) through (?) (Include the nomenclature, item line number, quantity, part and serial numbers for each component.)

B. REENTRY SYSTEMS. THE FOLLOWING RS COMPONENTS WERE SHIPPED ON (Date), BY (Mode of shipment). ETA TO VANDENBERG AFB IS (Date). SHIPPING DOCUMENT NUMBERS(S) (Number).

(1) RS SERIAL NUMBER: (Number).

C. REENTRY VEHICLES. THE FOLLOWING RV COMPONENTS WERE SHIPPED ON (Date), BY (Mode of shipment). ETA TO VANDENBERG AFB IS (Date). SHIPPING DOCUMENT NUMBER(S) (Number).

(1) through (?) (Include the nomenclature, part and serial numbers, and position for each RV component.)

[Minuteman Mk12A]: Include these components by position A, B, and C.

D. [Minuteman Mk12A]: PAYLOAD BULKHEAD (Serial number)

E. [Minuteman Mk12A]: ESS GENERATOR (Serial number)

F. [Peacekeeper]: DEPLOYMENT MODULE (Part number)

G. [Peacekeeper]: TRACTOR MOTOR (Part number)

H. [Peacekeeper]: DEPLOYMENT MODULE ELECTRONICS (Part number)

I. SHROUD ASSEMBLY. THE FOLLOWING SHROUD ASSEMBLY COMPONENTS WERE SHIPPED ON (Date), BY (Mode of shipment). ETA TO VANDENBERG AFB IS (Date). SHIPPING DOCUMENT NUMBER(S) (Number).

(1) through (?) (Include the nomenclature, part and serial numbers, and position for each RV component.)

J. PENETRATION AIDS. THE FOLLOWING PENETRATION AIDS COMPONENTS WERE SHIPPED ON (Date), BY (Mode of shipment). ETA TO VANDENBERG AFB IS (Date). SHIPPING DOCUMENT NUMBER(S) (Number).

(1) through (?) (Include the nomenclature, part and serial numbers for each penetration aids component.)

2. ADDITIONAL INFORMATION.

A. UNACCOMPLISHED TCTOS: (If any)

B. LAST RS INSTALLATION DATE: (Date)

C. ABLATIVE REPAIRS ACCOMPLISHED SINCE MISSILE SELECTION: (If any)

D. REPAIRS OR COMPONENTS TO BE REPLACED AT VANDENBERG AFB: (If any)

E. ALL ORDNANCE ITEMS HAVE RECEIVED ELECTRICAL CHECK/VISUAL INSPECTION BEFORE SHIPMENT: (Yes or No)

3. POC: (Rank, name and phone number)

Attachment 7

UNCLASSIFIED SAMPLE OTL COMPONENT DAMAGE REPORT

FROM:(REPORTING UNIT)

TO:HQ AFSPC PETERSON AFB CO//DOTO/LGML/LGMW//

HQ SWC SHRIEVER AFB CO//XRT//

INFO:20AF F E WARREN AFB WY//CC/DO/LG//

576 FLTS VANDENBERG AFB CA//CC/TE/TM/TEO/TEM/TMO/TMW//

OO-ALC HILL AFB UT//LME/LMEI/LMD//

UNCLAS E F T O

SUBJ: GLORY TRIP (NUMBER), COMPONENT DAMAGE REPORT

1. OTL IDENTIFIER: (GT XX , Report no. #).

2. COMPONENT DAMAGED: (Include part and serial number).

3. TECHNICAL ORDER: (Include the page, paragraph, and step number when damaged was discovered).

4. DAMAGE DESCRIPTION: (Self explanatory).

5. WHEN DISCOVERED: (Self Explanatory).

6. PROBABLE CAUSE: (Self explanatory).

7. REMARKS: (Include action taken to correct problem).

8. POC: (Rank, name, and phone number).

Attachment 8

UNCLASSIFIED SAMPLE OTL MISSION AND SCORING REPORT

FROM:576FLTS VANDENBERG AFB CA//CC//

TO:SECDEF WASHINGTON DC//USDRE/DIMO//

JOINT STAFF WASHINGTON DC//J-3 (STRAT OPS)//

HQ USAF WASHINGTON DC//TE/TEP/XONO/AQSL/AQSI/ILMW//

HQ AFSPC PETERSON AFB CO//DOT/DRM/DOO/DOX/DOTO/DOMN/LGM//

HQ SWC SHRIEVER AFB CO//CC/CV/XRT//

HQ AFOTEC KIRTLAND AFB NM//TSL//

USSTRATCOM OFFUTT AFB NE//J312//

20AF F E WARREN AFB WY//CC/DO/LG//

620 MOF F E WARREN AFB WY//

MIT-LL LEXINGTON MA//FRANK TRULL/KMR DATA LIBRARY//

(For Mk21 and Mk12 add)

LAWRENCE LIVERMORE NATIONAL LABORATORIES//TERRY LINDMAN//(UNIT)//CC//

(UNIT)//OG//CC//

(UNIT)//LG//CC//

(UNIT)//OSS//CC/OSKE//

DIR NUC WPNS KELLY AFB TX//NWCP//

OO ALC HILL AFB UT//LM//

DET 10 SMC MARCH AFB CA//MMM//

INFO:DOE SANDIA LABS ALBUQUERQUE NM//ORG12363//

DMCO ROCKWELL INTERNATIONAL ANAHEIM CA

TRW VT&E VANDENBERG AFB CA//B WENQUIST//

S E C R E T FORMERLY RESTRICTED DATA

SUBJ: GLORY TRIP (NUMBER) QUICKLOOK MISSION AND SCORING REPORT (U)

1. THIS MESSAGE IS IN THREE PARTS.

PART I: (U) THIS IS THE INTIAL QUICKLOOK MISSION AND SCORING REPORT FOR GLORY TRIP (NUMBER), 30 SW OP (W NUMBER), (LGM 30G OR LGM 118A) MISSILE, USING KMISS FOR SCORING.

PART II: (U) MISSION EVENTS:

A. (U) COUNT PICKUP: (Zulu DTG).

B. (U) ALCS EVENTS: (If applicable).

C. (U) ABNORMAL COUNTDOWN EVENTS: (Holds, recycles, etc.).

D. (U) TIME OF LIFTOFF (OR ABORT): (Zulu DTG).

E. (U) SUBSYSTEM PERFORMANCE: (Nominal or non-nominal to include special objectives; don't define failure modes).

F. (U) SENSOR COVERAGE: (By exception, if lack of coverage degrades mission objectives).

G. (U) REMARKS: (Include any significant events or discrepancies not reported above. Base all inflight times on liftoff. For anomalies, don't include failure modes. Refer inquiries to the 576 FLTS LAG Report and inform them information will be disseminated on a need-to-know basis.).

PART III: (U) SCORING RESULTS:

A. (S-FRD) RV-1: TIME OF IMPACT: (Zulu DTG), IMPACT LOCATION IN DOD WGS COORDINATES: (Lat, Long), RADIAL MISS DISTANCE: (In feet), DOWNRANGE MISS DISTANCE: (In feet), CROSSRANGE MISS DISTANCE: (Left or Right in feet).

2. POC IS (Rank, name, and phone number).

Attachment 9

SAMPLE OTL PERFORMANCE REPORT

3G	Velocity Table for RV Deployment
3H	Position Table for Boost Phase
3I	Velocity Table for Boost Phase
3J	Propulsion System Performance
3K	Mark 21, 12 or 12A System Sequence of Events
Appendix A -	Distribution List

*__Accuracy.__ By definition, circular error probability (CEP) is the radius of a circle centered on the target, inside which we expect half the reentry vehicles (RVs) to impact. Half will land outside the CEP; however, the radial miss should be no more than 3 1/2 times the CEP. Anything over this becomes a reliability failure and not an accuracy data point.

*__Reliability__. Weapon system reliability (WSR) for ICBMs is a product of launch reliability, powered flight reliability, missile guidance set reliability, reentry vehicle reliability, ESSG reliability, and warhead reliability. The established goal for the WSR is found in the ICBM Weapon System Mission Objectives Report. This document is published by HQ AFSPC/DRM and is classified secret. HQ SWC/XRT maintains the SIOP CEP/WSR estimate and maintains the representative data base for both.

Attachment 10

SAMPLE OTL TASK FORCE COMMANDER'S REPORT

MEMORANDUM FOR(Unit/CC)

20 AF/DO/LG

HQ AFSPC/DOT/LGM

HQ SWC/CC/XRT

576 FLTS/CC

FROM: (Unit)

SUBJECT: Glory Trip (Number) Task Force Commander's Report

1. The following report is a summary of all activities in support of Glory Trip (Number) including a journal of maintenance and operations activities, a history of weapon system components, and a TDY funding summary.

2. Maintenance and Operations Activities:

a. Missile select date _____. All components listed below (list exceptions if any) are from LF _____.

(1) Missile Booster:Serial number _____

(2) Primary Missile Guidance Set:Serial number _____

(3) Alternate Missile Guidance Set:Serial number _____

(4) Propulsion System Rocket Engine:Serial number _____

(5) Reentry System:Serial number _____

b. Part I - Alert Readiness Tests for LF _____ components:

(1) GST or SCNT:(Date)Results (Normal/Abnormal)

(2) Missile Test Segment 1:(Date)Results (Normal/Abnormal)

(3) Missile Test Segment 2:(Date)Results (Normal/Abnormal)

(4) Enable Test:(Date)Results (Normal/Abnormal)

c. Component damage. (If any).

d. Component Removal:

(1) Reentry System:(Date)

(2) Primary Missile Guidance Set:(Date)

(3) Propulsion System Rocket Engine:(Date)

(4) Missile Booster:(Date)

e. Component Shipments to Vandenberg AFB.

(1) Reentry System:(Mode)(Date)

(2) Primary Missile Guidance Set:(Mode)(Date)

(3) Alternate Missile Guidance Set: (Mode)(Date)

(4) Propulsion Rocket Engine:(Mode)(Date)

(5) Missile Booster:(Mode)(Date)

f. Component Arrival at Vandenberg AFB.

(1) Reentry System:(Date)

(2) Primary Missile Guidance Set:(Date)

(3) Alternate Missile Guidance Set:(Date)

(4) Propulsion System Rocket Engine:(Date)

(5) Missile Booster:(Date)

g. Task Force Arrival.

(1) Task Force Commander:(Date)

(2) Task Force Operations Officer:(Date)

(3) Task Force Maintenance Officer:(Date)

(4) Task Force NCOIC:(Date)

(5) Remainder of Task Force:(Date)

h. Sequence of Events after Task Force Arrival at Vandenberg AFB.

(1) Missile Guidance Set/Propulsion System Rocket Engine mate:(Date)

(2) Post Boost Control System/Mod 7 Wafer mate:(Date)

(3) Missile Alert Facility (Designator) Start up:(Date)

(4) Missile Booster emplacement:(Date)

(5) Post Boost Control System mate to Missile Booster:(Date)

(6) Reentry System mate to Post Boost Control System:(Date)

(7) Weapon System Tape load and Start up:(Date)

(8) Weapon System declared Alert Ready:(Date)

(9) Missile Launch:(Date)

NOTES:

(Include reason for delay to Alert Ready date if required.)

3. Weapon System Component History.

a. Missile Booster. (From Receipt through Launch Document)

b. Propulsion System Rocket Engine. (From Receipt through Launch Document)

c. Primary Missile Guidance Set Recycle History. (From Receipt through Launch

Document)

Total: _____ hours, or _____ days, or _____ years of operational time.

Total operational since last recycle: _____ hours, or _____ days, or _____ years.

4. TDY Funding Summary:

a. Task Force Size: _____

(1) Officers: _____

(2) Enlisted: _____

b. Mode of Travel to and from Vandenberg AFB CA:

(1) Commercial Air: (Number)

(2) Privately Owned Vehicle: (Number)

(3) Government Owned Vehicle: (Number)

c. Total TDY cost: $_____

(1) TR costs:$_____

(2) TDY:$_____

5. Task Force Support and Recommendations. (Comment on overall support for the Task Force. Summarize recommendations for weapon system improvements or the FDE process.)

TASK FORCE COMMANDER

Attachment 11

SEL KEY EVENT FLOW

Table A11.1. Flow.

ACTIVITY	SELP	SELM
Publish TEO (HQ SWC)	T-22 weeks	T-22 weeks
Begin TSD (576 FLTS)	T-16 weeks	T-16 weeks
Appoint SEL Test Support Manager (Unit)	T-15 weeks	T-15 weeks
Begin Review of Unit OPORD (Unit)	T-14 weeks	T-14 weeks
T.O. Review and Submit Changes (Unit)	T-13 weeks	T-13 weeks
Publish- Unit OPORD (Unit)	T-8 weeks	T-8 weeks
Unit- Pretest Briefing (HQ SWC/576 FLTS)	T-8 weeks	T-8 weeks
OO-ALC MTU on Station (OO-ALC/Unit)	T-8 weeks	T-8 weeks
Review of Unit Lesson Plans (OO-ALC/576 FLTS)	T-8 weeks	T-8 weeks
Distribute Draft TSD (576 FLTS)	T-8 weeks	T-8 weeks
Submit Deposture Schedule to 576 FLTS (Unit)	T-6 weeks	T-6 weeks
576 FLTS Test Manager on Station	T-3 weeks	T-4 weeks
Conduct Alert Readiness Tests (576 FLTS/Unit)	T-3 weeks	T-4 weeks
Distribute Final TSD (576 FLTS)	T-2 weeks	T-2 weeks
Begin SEL Deposture (Unit)	NET T-12 days	NET T-19 days
Last Line Isolation (576 FLTS/Unit)	Fri Before Test Wk	Fri Before Test Wk
SEL Alert (Unit)	Fri Before Test Wk	Fri Before Test Wk
Readiness Review (HQ SWC/OO-ALC/576 FLTS/Unit)	Mon of Test Wk	Mon of Test Wk
OO-ALC MIF (UHF Van) Arrives at Unit (OO-ALC)	Mon of Test Wk	Mon of Test Wk
Airborne Test Day	Tues of Test Wk	Tues of Test Wk
Ground Test Day	Tues of Test Wk	Thur of Test Wk
EWO Reposture Begins (Unit)	Wed of Test Wk	Fri of Test Wk
EWO Alert (Unit)	NLT T+12 days	NLT T+19 days
Conduct T.O. Review (Unit)	NLT T+5 weeks	NLT T+5 weeks
Publish Performance Report (576 FLTS)	60 days from receipt of last data	60 days from receipt of last data
Submit SEL Expense Report (Unit)	NLT T+90 days	NLT T+90 days

Attachment 12

SAMPLE SEL STATUS REPORT

FROM: (REPORTING UNIT)

TO: HQ AFSPC PETERSON AFB CO//DOTO/LGML//

INFO: USSTRATCOM OFFUTT AFB NE//J312/J441//

20AF F E WARREN AFB WY//DO/LG//

620 MOF F E WARREN AFB WY//

30OG VANDENBERG AFB CA//CC//

HQ SWC SHRIEVER AFB CO//CC/XRT//

576FLTS VANDENBERG AFB CA//TEM//

OO-ALC HILL AFB UT//LME/LMEI-SELECT//

UNCLAS

SUBJ: GIANT PACE (NUMBER) STATUS REPORT #___

1. THIS MESSAGE CONSISTS OF THREE PARTS CORRESPONDING TO PARTS I, II, AND IV OF THE SIMULATED ELECTRONIC LAUNCH (SEL) PROCESS. UPDATES AFTER EACH PART ARE AS FOLLOWS:

2. PART I. ALERT READINESS TEST:

SITE	DATE	SCNT/GST	ENABLE TEST	MISSILE TEST
(LF Number)	(Date of test)	(S,SA,F, or NT)	(S,SA,F, or NT)	(S,SA,F, or NT)

3. PART II. SEL POSTURE:

SITE	DTG
(LCC/LF Number)	(Zulu DTG)

4. PART IV. SIOP REPOSTURE

SITE	DTG
(LCC/LF Number)	(Zulu DTG)

5. [SELP]: (LF) (SUCCESSFULLY COMPLETED/SUCCESSFULLY COMPLETED WITH AN ANOMALY/FAILED) THE USDA CONNECTIVITY TEST ON (DATE).

6. POC: (Name, rank, phone number)

NOTE:

This report should be unclassified and must not contain data on causes of failures or failed components. A description of abnormal indications, hardware/software anomalies or test failures must be provide in a classified follow-up SEL Problem Report.

Attachment 13

SAMPLE SEL READINESS REVIEW AGENDA

1. Introduction - TSM
2. Briefing and Verifying Personnel - TSM
3. Implementing Directives - TSM
4. Test Overview - TSM/TM

- Test Objectives
- Ground and Airborne Test Day Test Increment Activities
- Anomaly Analysis Procedures
- Key personnel Locations for Part II and III

READINESS CERTIFICATIONS

5. Codes - OSKC
6. Enable and Launch Control Panel Verifications and Locations - OSKC
7. LF/MAF Isolation Verification - Maintenance Office
8. LF Configuration Verification - Maintenance Office
9. Open TCTOs on Test LFs - Maintenance Office
10. Safety Plan and Training - SE
11. MCC Manning in Test Squadron - OSOT
12. MCC Test Sequence Training - OSOT
13. MCC Exercise Initiation Training - OSKE
14. Maintenance Training - LG
15. ALCS Code Verification - OL-A 20 AF
16. ALCS Communications and Launch Procedures - OL-A 20 AF
17. Operations Certification Summary - OG/576 FLTS/CC
18. Maintenance Certification Summary - Maintenance Office
19. TSM and Wing Commander's Verification Certification - TSM & CC

Attachment 14

UNCLASSIFIED SAMPLE SEL PROBLEM REPORT

FROM: (REPORTING UNIT)

TO: HQ AFSPC PETERSON AFB CO//DOTO/LGML//

INFO: USSTRATCOM OFFUTT AFB NE//J312/J441//

20AF F E WARREN AFB WY//DO/LG//

HQ SWC SHRIEVER AFB CO//CC/XRT//

620 MOF F E WARREN AFB WY//

576FLTS VANDENBERG AFB CA//TEM//

OO-ALC HILL AFB UT//LME/LMEI-SELECT//

(CLASSIFICATION)

SUBJ: GIANT PACE (NUMBER) PROBLEM REPORT # ____ (U)

1. (U) TEST: GIANT PACE (Number)

2. (U) UNIT: (Missile unit, Squadron)

3. (U) PROBLEM SITE: (LCC/LF Number)

4. ( ) PROBLEM DESCRIPTION: (Include weapon system commands/responses, components, parts, and serial numbers)

5. (U) TECHNICAL ORDER: (Include the page, paragraph, and step number of T.O. in use when problem was discovered.)

6. (U) WHEN DISCOVERED: (Self explanatory)

7. ( ) PROBABLE CAUSE: (Self explanatory)

8. ( ) REMARKS: (Include actions taken to correct problem.)

9. (U) POC: (Name, rank, and phone number.)

NOTES:

When this report is used to report preliminary causes of Parts I or III failures, it will be classified IAW the appropriate Security Classification Guide.

Fill in classification ( ) of each paragraph as appropriate.

This is just a preliminary report of initial indications and suspected causes. Detailed analysis results will be reported in the SEL Anomaly Analysis Report and the Performance Report.

Attachment 15

UNCLASSIFIED SAMPLE SEL TERMINAL COUNTDOWN REPORT

FROM: (REPORTING UNIT)

TO: HQ AFSPC PETERSON AFB CO//DO/LG/DOTO/LGML//

INFO: USSTRATCOM OFFUTT AFB NE//J312/J441//

20AF F E WARREN AFB WY//CC/DO/LG//

620 MOF F E WARREN AFB WY//

HQ SWC SHRIEVER AFB CO//XRT//

576FLTS VANDENBERG AFB CA//CC/TEM//

OO-ALC HILL AFB UT//LME/LMEI-SELECT//

UNCLAS E F T O

SUBJ: GIANT PACE (NUMBER) TERMINAL COUNTDOWN REPORT # ____

1. TEST INCREMENT: (Increment number)

(A) COMMIT TIME: (Zulu DTG)

(B) METHOD OF COMMIT: (Ground or Airborne)

(C) SORTIE TCD RESULT

(LF number) (Zulu DTG) (Successful, Successful with anomaly, or Failure)

2. TEST INCREMENT: (Increment number)

(A) COMMIT TIME: (Zulu DTG)

(B) METHOD OF COMMIT: (Ground or Airborne)

(C) SORTIE TCD RESULT

(LF number) (Zulu DTG) (Successful, Successful with anomaly, or Failure)

3. TEST INCREMENT: (Increment number)

(A) COMMIT TIME: (Zulu DTG)

(B) METHOD OF COMMIT: (Ground or Airborne)

(C) SORTIE TCD RESULT

(LF number) (Zulu DTG) (Successful, Successful with anomaly, or Failure)

4. POC: (Name, rank, and phone number)

Attachment 16

UNCLASSIFIED SAMPLE SEL ANOMALY ANALYSIS REPORT

FROM: (REPORTING UNIT)

TO: HQ AFSPC PETERSON AFB CO//DO/LG/DOTO/LGML//

INFO: USSTRATCOM OFFUTT AFB NE//J312/J441//

20AF F E WARREN AFB WY//CC/DO/LG//

620 MOF F E WARREN AFB WY//

HQ SWC SHRIEVER AFB CO//CC/XRT//

576FLTS VANDENBERG AFB CA//CC/TEM//

OO-ALC HILL AFB UT//LME/LMI-SELECT//

(CLASSIFICATION)

SUBJ: GIANT PACE (NUMBER) ANOMALY ANALYSIS REPORT # ____ (U)

1. (U) TEST: GIANT PACE (Number)
2. (U) UNIT: (Missile unit, Squadron)
3. (U) ANOMALY SITE: (LF/LCC number)
4. (U) CLASSIFICATION OF ANOMALY: (Classification)
5. (U) DATE/TIME OF ANOMALY: (Zulu DTG)
6. (U) TEST INCREMENT: (Number)
7. ( ) ANOMALY: (Detailed explanation of anomaly)
8. (U) TEST SYNOPSIS: (Brief description of test actions being accomplished.)
9. ( ) ANOMALY ANALYSIS: (Probable cause to include part number, serial numbers, and nomenclature of possible failed component.)
10. ( ) ACTION TAKEN: (Detailed explanation)
11. ( ) IMPACT OF ANOMALY: (Detailed explanation of effect on launch capability)
12. ( ) RECOMMENDATIONS: (Self explanatory)
13. ( ) CONCLUSION: (Summarize anomaly to include recommended scoring of site)
14. (U) POC: (Name, rank, and phone number)

NOTE:

Fill in classification ( ) of each paragraph as appropriate.

Attachment 17

OLYMPIC PLAY TEST REQUIREMENTS

Table A17.1. Requirements.

TEST/COMMAND	WS-133AM#	WS-133B#	WS-118A#
Enable Test (Note 1)	X	X	X
Missile Test (MM Seg I and II) (Note 1)	X	X	X
PLC-A Verification (Note 2)	X	X	X
Sensitive Command Network Test (Note 1)	X		X
Ground System Test (Note 1)		X	
Computer Memory Verification Check (Note 1)	X	X	X
Target Verification Interrogation (All-Call Day-to-Day)	X	X	X
Cases Checksum Printout			X
WSC Computer Memory Confidence Check (Note 3)	X	X	
WS BS/L Computer Memory Confidence Check (Note 3)	X	X	
MCG Computer Memory Confidence Check			X
Case Input Library Checksum (Note 3)	X	X	
Note 1: Command test to each on-alert sortie within primary responsibility. Note 2: Command PLC-A directed by OSKE. Return printouts to OSKE. Note 3: For Rapid Execution and Combat Targeting LCCs.			

Attachment 18

UNCLASSIFIED SAMPLE OLYMPIC PLAY RESULTS REPORT

FROM: (REPORTING UNIT)

TO: 576FLTS VANDENBERG AFB CA//TEE//

INFO: HQ AFSPC PETERSON AFB CO//DOTO/LGML//

20AF F E WARREN AFB WY//LGM//

SECRET

SUBJ: (UNIT) OLYMPIC PLAY REPORT

1. SQUADRON: (Self explanatory)

2. TEST DTG: (Zulu DTG test started)

3. TYPE OF TEST: (Scheduled, HQ AFSPC, 20 AF, or Local Exercise)

4. NUMBER OF LFS TESTED: (Number of LFs tested and scored)

5. NUMBER OF SUCCESSFUL LFS: (Number of LFs scored as successful)

6. NUMBER OF SUCCESSFUL WITH ANOMALY LFS: (Number of LFs scored as successful with anomaly)

7. TOTAL NUMBER OF SUCCESSFUL LFS: (Number of LFs scored successful and successful with anomaly.)

8. NUMBER OF FAILED LFS: (Number of LFs scored as failures)

9. NUMBER OF NO-TEST LFs: (Number of LFs scored as no-test)

10. LF FAILURES: (Identify LF, reason for failure and corrective action. e.g. L-10 GMR 18, MOSR 19. STBNG DURING MISSILE TEST SEG 1. CORRECTIVE ACTION: R&R 403A1A (CSD(G)) DRAWER.)

11. SUCCESSFUL WITH ANOMALY LFS: (Identify LF, anomaly, and corrective action. e.g. G-02, NO RADDT DURING SCNT, CORRECTIVE ACTION: R&R UHF DRAWER.)

12. NO-TEST LFS: (Identify LF and reason for scoring as no-test. e.g. A-04 TRAINING LF.)

13. POC: (Name, rank, and phone number).

Attachment 19

SAMPLE OLYMPIC PLAY SORTIE EFFECTIVENESS REPORT

MEMORANDUM FOR 576 FLTS/TEE

FROM: (Unit)

(Unit Address)

SUBJECT: (Unit) Olympic Play Sortie Effectiveness Report for (LF number)

1. The following information is provided in accordance with Olympic Play Policy and Guidance, dated 1 Jun 98.

a. FAULT DESCRIPTION: (Description of fault to include Zulu DTG fault occurred, fault indications, and command being accomplished when fault occurred.)

b. CORRECTIVE ACTION: (Actions taken to correct fault to include Zulu DTG sortie was returned to SIOP alert.)

c. LF HISTORY: (Include any recent LF history which may be pertinent to this fault.)

d. RECOMMENDED SCORING: (IAW scoring criteria in para 9.3.)

2. If there are any questions concerning this report, please contact (name and rank) at DSN (phone).

Signature Block

cc:

HQ AFSPC/DOTO/LGML

HQ SWC/XRT/

20 AF/LGM

OO-ALC/LME/LMEI

NOTE:

Report will be mailed to the following addresses:

HQ AFSPC/DOTO	**HQ AFSPC/LGML**	**576 FLTS/TEE**
150 Vandenberg St Ste 1105	150 Vandenberg St Ste 1105	747 Nebraska Ave Ste 33
Peterson AFB CO 80914-4240	Peterson AFB CO 80914-4470	Vandenberg AFB CA 93437-6293
HQ SWC/XRT	20 AF/LGM	OO-ALC/LME/LMEI
730 Irwin Ave Ste 83	7100 Saber RD Ste 3	6014 Dogwood Ave
Schriever AFB CO 80912-7383	F E Warren AFB WY 82005-2670	Hill AFB UT 85056-5816

Attachment 20

UNCLASSIFIED SAMPLE OF OLYMPIC PLAY QUARTERLY REPORT

Table A20.1. Sample Report.

SECRET
OLYMPIC PLAY TEST RESULTS (U)
1 JAN-31 MAR 98

CHART I - UNIT SUMMARY (U)

UNIT	SYSTEM	EVALU-ATED	SUC-CESSFUL	SUC-CESS-FUL W/ ANOMA-LY	TOTAL SUCCESS-FUL	FAIL-URE	SUC/EVAL RATIO
90 SW	133 AM-CDB	435	434	1	435	O	1.0000
	118A	145	144	0	144	1	0.9931
91 SW	133 AM-CDB	441	400	1	400	39	0.9070
341 SW	133 AM-CDB	85	85	0	85	0	1.0000
	133B-CDB	145	144	1	145	0	1.0000

SECRET

CHART II - WEAPON SYSTEM SUMMARY (U)

SYSTEM	EVALU-ATED	SUCCESS-FUL	SUCCESS-FUL W/ ANOMALY	TOTAL SUCCESS-FUL	FAIL-URE	SUC/EVAL RATIO
133 AM-CDB	961	919	2	920	39	0.9573
133 B-CDB	579	577	1	578	1	0.9983
TOTAL MM	**1,540**	**1,496**	**3**	**1,498**	**40**	**0.9727**

TOTAL PK	**145**	**144**	**0**	**144**	**1**	**0.9931**
TOTAL ICBM	**1,685**	**1,640**	**3**	**1,642**	**41**	**0.9744**

SECRET

OPR: 576 FLTS/TEE CLASSIFIED BY:ICBM SCG, 30 Sep 97

DATE: 15 APR 98

DECLASSIFY ON:OADR

SECRET

(UNCLASSIFIED EXAMPLE)

Atch 1 (1 of 1)

SORTIE FAILURE DATA

1 JAN - 31 MAR 98

90 SW F E WARREN AFB

SORTIE: (Self explanatory) **DTG:** (Zulu DTG test started)

FAULT: (Brief description of failure to include fault indications and test being accomplished.)

CORRECTIVE ACTION: (Corrective action taken.)

SORTIE: B-05 **DTG:** 05/1800Z MAR 98

FAULT: MOSR 19 DURING MISSILE TEST SEG 1.

CORRECTIVE ACTION: R&R 403A1A DRAWER (COMMAND SIGNAL DECODER-GROUND).

91 SW MINOT AFB

NO FAILURES

341 SW MALMSTROM AFB

SORTIE: R-21 **DTG:** 14/0000Z FEB 98

FAULT: MSR 559 DURING ENABLE TEST.

CORRECTIVE ACTION: R&R 6406A6 DRAWER (SIGNAL DATA CONVERTER).

Atch 2 (1 of 1)

UNCLASSIFIED

UNCLASSIFIED

SORTIE ANOMALY DATA

1 JAN - 31 MAR 98

90 SW F E WARREN AFB

SORTIE: (Self explanatory) **DTG:** (Zulu DTG test started)

FAULT: (Brief description of failure to include anomaly indications and test being accomplished.)

CORRECTIVE ACTION: (Corrective action taken.)

SORTIE: A-05 **DTG:** 05/1800Z MAR 98

FAULT: NO GMR 18 DURING MISSILE TEST SEG 1.

CORRECTIVE ACTION: R&R 403A4 (MESSAGE PROCESSOR DRAWER).

91 SW MINOT AFB

NO ANOMALIES

341 SW MALMSTROM AFB

NO ANOMALIES

Atch 3 (1 of 1)